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# SPECIFICATION

METALLIZED POLYPROPYLENE FILM CAPACITOR

MPE, MPEF, MPEC, MPEV -  
TYPE 250, 315, 400, 450, 630, 800, 1000, 1250, 1600V.DC

DRAWING PSC317000

PLEASE RETURN 1 COPY WITH RECEIVED STAMP.

DATE October 19, 2011

DESIGNED Y. Ootashiro

CHECKED M. Sasaki

APPROVED H. Kawagoe

NISSEI ELECTRIC CO., LTD.

110177



## 安全に関する注意

コンデンサを使用するに当たり、使用環境、及び取り付け環境を確認の上、納入仕様書に規定した定格性能の範囲内でご使用下さい。

納入仕様書、添付注意事項の範囲を越えて使用しますと、ショート、オープン、発煙、発火に至る場合がありますので、定格性能の範囲内であることを確認願います。

尚、納入仕様書に記載のない項目、不明な内容については、必ずお問い合わせ下さい。

又、生命に影響を与える可能性がある装置、機器（生命維持装置、航空機用制御装置、自動車用制御装置等）に使用される場合にも必ずお問い合わせ下さい。

※本仕様書は、発行日より6ヶ月を経過して返却されなかった場合は、受領いただけなかったものと判断し、無効とさせていただきます事ご了承願います。



## Cautions About Safety In Use of Capacitors

When using a capacitor, please use one within the range of values specified in the specification after checking the environments of using and mounting.

If used beyond the range specified in the specification or the attached cautions, it may lead to short circuit, open, smoking and firing.

Be sure to inquire of us as to the items which are not specified in the specification or are unclear to you.

Also, in case of using capacitors for such equipment or apparatus as may possibly affect human lives like life-support system, aircraft and automotive control systems, etc., please never fail to inquire of us as to further details.

If this specification is not returned within six months, we consider it not to be accepted by you and will make it null and void.



|               |   |                           |
|---------------|---|---------------------------|
| SPECIFICATION | METALLIZED POLYPROPYLENE FILM CAPACITOR | SPEC<br>P S C 3 1 7 0 0 0 |
|---------------|---|---------------------------|

## 1. SCOPE

This specification defines general requirements for metallized polypropylene film capacitor MPE type (hereinafter called capacitor).

## 2. PARTS NUMBER CODE SYSTEM

|   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| M | P | E |  | * | 0 | 2 | 5 | 0 | J | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

## Designation

M P E : Straight lead type

M P E F : Single-formed lead type

M P E C : Cut lead type

M P E V : Automatic vertical insertion type (Formed lead type)

## Internal use

## Rated DC voltage

250 , 315 , 400 , 450 , 630 , 800 , 1000 , 1250 , 1600V.DC

## Tolerance on capacitance

G :  $\pm 2\%$  , H :  $\pm 3\%$  , J :  $\pm 5\%$  , K :  $\pm 10\%$

## Capacitance Code

Capacitance value shall be given by 3-digit figure of which unit used is expressed in pF.

The first 2 digits are significant figures of the capacitance value, the third digit to indicate the number of additional zeros to follow the significant figure.

⑥ Model code (Internal use)

| REVISIONS | SIGNATURE                       | DATE                 |
|-----------|---------------------------------|----------------------|
|           | DESIGNED<br><i>Y. Ootashiro</i> | <i>April 1, 2011</i> |
|           | CHECKED<br><i>M. Sasaki</i>     | <i>April 1, 2011</i> |
|           | APPROVED<br><i>H. Kawagoe</i>   | <i>April 1, 2011</i> |

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## Lead dimension / Packing mode

| Designation | Code    |              |         |              |
|-------------|---------|--------------|---------|--------------|
| M P E       | 0 0 0 0 |              |         |              |
| M P E F     | Code    | Lead spacing | Code    | Lead spacing |
|             | 0 0 7 5 | 7.5 mm       | 0 2 0 0 | 2 0.0 mm     |
|             | 0 1 0 0 | 1 0.0 mm     | 0 2 2 5 | 2 2.5 mm     |
|             | 0 1 2 5 | 1 2.5 mm     | 0 2 5 0 | 2 5.0 mm     |
|             | 0 1 5 0 | 1 5.0 mm     | 0 2 7 5 | 2 7.5 mm     |
| M P E C     | 0 0 5 0 |              |         |              |
| M P E V     | Code    | Style        |         |              |
|             | D 2 0 0 | 2            |         |              |
|             | D 2 1 0 | 3            |         |              |
|             | 0 2 0 0 | 5 , 6        |         |              |

## 3. RATING

3.1 Operating Temperature Range : Operating temperature range to capacitors shall be  $-40^{\circ}\text{C}\sim+105^{\circ}\text{C}$ .

3.1.1 Maximum Operating Temperature : Maximum value of capacitor's surface temperature (ambient temperature+self heating temperature rise+radiation and conduction heat from other electric supply sources) at which capacitors shall be capable of applying continuously.

3.1.2 Minimum Operating Temperature : Minimum temperature range at which capacitors shall be capable of applying continuously.

3.2 Rated voltage : The rated voltage shall be continuously usable within a working temperature range, and there are 9 kinds of rated voltages - 250, 315, 400, 450, 630, 800, 1000, 1250 and 1600V.DC.

## 3.3 Capacitance range

|         |                            |      |          |                             |      |
|---------|----------------------------|------|----------|-----------------------------|------|
| 250V.DC | 0.010 ~ 10.0 $\mu\text{F}$ | E-24 | 800V.DC  | 0.0010 ~ 0.68 $\mu\text{F}$ | E-24 |
| 315V.DC | 0.010 ~ 4.7 $\mu\text{F}$  | E-24 | 1000V.DC | 0.0010 ~ 0.22 $\mu\text{F}$ | E-24 |
| 400V.DC | 0.010 ~ 3.3 $\mu\text{F}$  | E-24 | 1250V.DC | 0.0010 ~ 0.18 $\mu\text{F}$ | E-24 |
| 450V.DC | 0.10 ~ 3.3 $\mu\text{F}$   | E-24 | 1600V.DC | 0.0010 ~ 0.10 $\mu\text{F}$ | E-24 |
| 630V.DC | 0.010 ~ 2.2 $\mu\text{F}$  | E-24 |          |                             |      |

## 3.4 Tolerance on capacitance

250, 315, 400, 450, 630V.DC ...  $\pm 3\%$  ,  $\pm 5\%$  ,  $\pm 10\%$   
 800, 1000V.DC ...  $\pm 3\%$  ,  $\pm 5\%$   
 1250, 1600V.DC ...  $\pm 2\%$  ,  $\pm 3\%$  ,  $\pm 5\%$

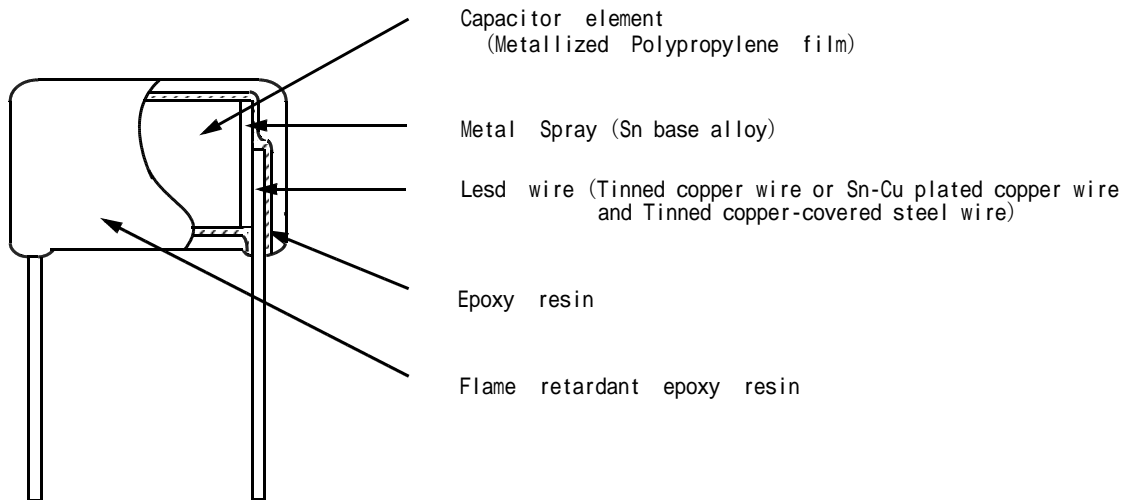
(However, for products with voltage rating range of 1250V & 1600V and capacitance range from 0.0010~0.010  $\mu\text{F}$ , products with tolerance of  $\pm 2\%$  are available.)

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|---------------|---|---------------------------|
|---------------|---|---------------------------|

#### 4. CONSTRUCTION OF CAPACITOR

The element of a capacitor shall have a construction that metallized polypropylene film as a dielectric is wound. The element of non-inductive construction shall be connected to lead wires.

Exterior coating shall be protected by flame retardant epoxy resin (UL94V-0) approved for moisture proof and insulating process.



#### 5. DIMENSIONS

Dimensions are specified in the attached sheet.

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## 6. MARKING

## 6.1 Marking item

The capacitors shall be marked clearly by an indelible way.

## 1) Nominal capacitance

Shall be marked with 3-digit code. Example) 104 , 105

## 2) Tolerance on capacitance

G , H , J , K

## 3) Production date code

Marking(Year) : It shall be indicated by the alphabet except G, I, O, Q, Y, Z.

| Year | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|------|------|------|------|------|------|------|------|------|------|------|------|
| Code | A    | B    | C    | D    | E    | F    | H    | J    | K    | L    | M    |

## Marking(Month)

| Month | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|-------|---|---|---|---|---|---|---|---|---|----|----|----|
| Code  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | O  | N  | D  |

## Marking(Week)

| Week | 1 | 2 | 3 | 4 | 5 | 6 |
|------|---|---|---|---|---|---|
| Code | 1 | 2 | 3 | 4 | 5 | 6 |

## 4) Rated DC voltage

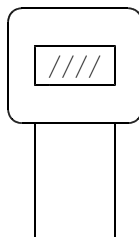
Unit code V is omitted.

## 5) Manufacturer's Identification

N I S

## 6.2 Marking position

(Example)



1 0 4 J 2 5 0  
N I S J 8 1

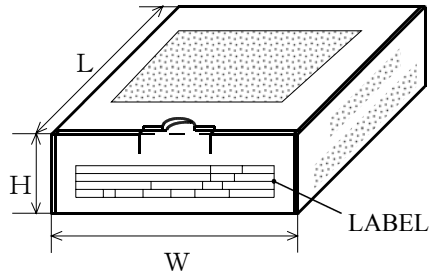
|               |   |                           |
|---------------|---|---------------------------|
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|---------------|---|---------------------------|

7. PACKING

1) Straight leads, formed leads and cutted leads type.

The capacitors shall be put in poly-bag and packed in box marked with necessary information.

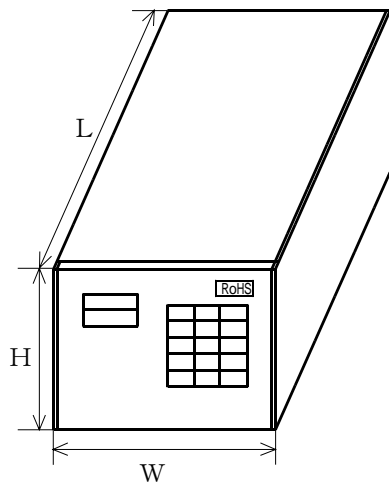
Inside packing case



Dimension (mm)

| W     | L     | H   |
|-------|-------|-----|
| 1 9 8 | 1 7 6 | 7 4 |

External packing case



Dimension (mm)

| Inside packing case quantity | W     | L     | H     |
|------------------------------|-------|-------|-------|
| 2                            | 1 6 5 | 2 1 0 | 2 0 0 |
| 4                            | 2 1 0 | 3 1 0 | "     |
| 6                            | 2 3 5 | 4 1 0 | "     |
| 8                            | 3 1 0 | 4 1 0 | "     |
| 1 2                          | 4 1 0 | 4 5 0 | "     |

Example)

|               |  |      |        |           |          |         |            |
|---------------|--|------|--------|-----------|----------|---------|------------|
| CODE CUSTOMER |  |      |        | INSP DATE |          | PKG NO  |            |
| PARTS NO      |  |      |        | MACH NO   |          | QTY/PKG |            |
| ORDER NO      |  |      | LOT NO |           |          | ROHS    |            |
| TYPE          |  | ⑤ WV | TOL    | ⑥ CAP     | EDP CODE |         | ⑦ QT (PCS) |

|               |          |                    |          |
|---------------|----------|--------------------|----------|
| CODE CUSTOMER | MACH NO  | PRODUCTION COUNTRY | TOL(%)   |
| INSP DATE     | ORDER NO | TYPE               | CAP      |
| PARTS NO      | LOT NO   | W V                | EDP CODE |
|               |          |                    | QT(PCS)  |

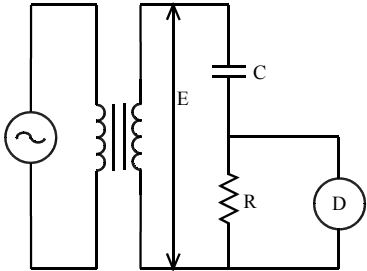
2) Automatic vertical insertion type.

This is specified by the specification of automatic vertical insertion type.



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|--|---|---------------------------|
| <p>8. APPLICABLE SPECIFICATIONS<br/>Unless otherwise specified, performance and a testing method shall comply with JIS C 5101-1:1998.</p> <p>9. DISUSE OF O.D.C.<br/>No ozone depleting chemicals are used at any stage of the manufacturing process.</p> <p>10. DISUSE OF PBB0, PBDPO, PBDPE, PBBs<br/>This products does not contain PBB0, PBDPO, PBDPE, PBBs.</p> <p>11. CERTAIN HAZARDOUS SUBSTANCES RESTRICTED BY RoHS DIRECTIVE<br/>In the product, materials to which certain hazardous substances restricted by RoHS Directive (2002/95/EC) (cadmium, hexavalent chromium, mercury, lead, PBB and PBDE) are added on purpose aren't used.</p> <p>12. PRODUCTION COUNTRY<br/>• JAPAN<br/>• CHINA</p> <p>Production country shall be distinguished in the column .</p> <p>Example)            JP : JAPAN<br/>                      blank : CHINA</p> |   |                           |

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|--|---|--|
| <p>13. CHARACTERISTICS AND TEST CONDITIONS</p> <p>13.1 TEST CONDITIONS</p> <p>The test and measurement, unless otherwise specified, the standard range of atmospheric conditions of marking measurements and test is as follows</p> <p style="padding-left: 40px;">Ambient temperature : 5 to 35°C</p> <p style="padding-left: 40px;">Relative humidity : 45 to 85%</p> <p>If there may be anydoubt on the results, measurements shall be made within the following limits.</p> <p style="padding-left: 40px;">Ambient temperature : 20±2°C</p> <p style="padding-left: 40px;">Relative humidity : 60 to 70%</p> <p>13.2 Electrical characteristics test</p> |   |  |
| Item   | Characteristics   | Test conditions  |
| Dielectric strength  | Between terminations  | No breakdown.<br>However momentary breakdown is permissible.   |
|  | Between terminations and case   | No breakdown.  |
| Insulation resistance<br>(Between terminations)  | $C \leq 0.33 \mu F$<br>30,000M or more<br>-----<br>$C > 0.33 \mu F$<br>10,000 F or more | Capacitors shall withstand 150% of rated DC voltage for 1 minute or 175% of rated DC voltage for 1~5 seconds.<br>(Charge or discharge current : 1A max)  |
| Capacitance  | Within the nominal tolerance.   | Capacitors shall withstand 200% of rated DC voltage for 1~5 seconds.<br><br>DC voltage specified below shall be applied for 1 minute, after which measurement shall be made.<br>Test voltage : 100V.DC |
| Tangent of loss angle  | 0.0005 or less  |  |
|  |   |  |

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|--------------------------------------|---|--|---|
| Item                                 | Characteristics   | Test conditions  |   |
| Connection of element                | There shall be no intermittent contacts or open circuiting which would result in any needle deflection on the voltage detector. | <p>As in the diagramed circuit measure the variation of terminal voltage for the series resistor(R) while a weak impact is made on the test capacitor to check the bonding strength of the terminals to the capacitor.</p>  <p>C : Capacitor<br/>R : Series resistor<br/><math>R(\ ) = 150/C(\mu F)</math><br/>C=Nominal capacitance <math>\mu F</math><br/>Ⓧ : Detector<br/>Internal impedance shall be large enough as compared with c.<br/>E : 100mV (peak value) Max<br/>at 10k~1MHz</p> |   |
| 13.3 Mechanical characteristics test |   |  |   |
| Item                                 | Characteristics   | Test conditions  |   |
| Termination strength                 | Tensile strength  | Test capacitors shall be fixed, and unless otherwise specified, a tensile force of 10N shall be gradually applied to the axial of the leads, and then maintained for $30 \pm 5$ seconds.   |   |
|                                      | Bending strength  | Without mechanical damage, such as break of terminal damage.   | <p>The bend test shall consist of hanging a weight of 5N to the end of the leads and then rotating the capacitors <math>90^\circ</math> in one direction, then to the starting point. This test shall be applied for 2.5 seconds per each time.</p> <p>At the same test speed, the capacitors shall be rotated <math>90^\circ</math> in alternating direction, then return to the starting point.</p> |

| SPECIFICATION                |  | METALLIZED POLYPROPYLENE FILM CAPACITOR  |  | SPEC<br>P S C 3 1 7 0 0 0   |                           |
|------------------------------|--|--|--|---|---------------------------|
| Item                         |  | Characteristics  |  | Test conditions   |                           |
| Vibration resistance         |  | No electrical discontinuity such as opening, short-circuit of 0.5ms or more.<br>Also, no abnormality on appearance after test. |  | The frequency shall be varied uniformly from 10Hz to 55Hz at 1.5mm amplitude and back to 10Hz in approximately 1 minute intervals.<br>This test shall be applied 2 hours per each direction, total 6 hours.   |                           |
| Solderability                |  | At least 90% of the circumferential face of termination up to immersed level shall be covered with new solder.                 |  | Capacitor's leads shall be immersed into Flux (10% rosin) for 5~10 seconds using sheltering board from radial test, then immersed into soldering bath at $235 \pm 5$ for $2 \pm 0.5$ seconds up to the depth of 1.5~2mm from the bottom of the body.<br>Immersed and removing speed shall be $25 \pm 2.5$ mm/sec. |                           |
| Resistance to soldering heat | Appearance                                 | No visible damage.   |  | Using sheltering board from the radial heat, capacitor's leads shall be immersed into soldering bath at $260 \pm 5$ for $10 \pm 1$ seconds up to the depth of 1.5~2mm from the bottom of the body.  |                           |
|                              | Dielectric strength (Between terminations) | No breakdown.  |  |   |                           |
|                              | Capacitance change                         | Within $\pm 3\%$ of the initial value.   |  | The capacitors shall withstand 150% of rated DC voltage for 1 minute.   |                           |
| 13.4 Climatic test           |  |  |  |   |                           |
| Item                         |  | Characteristics  |  | Test conditions   |                           |
| Cold                         | Capacitance change                         | Within +2, -0% of the initial value at +20°C.  |  | Measured at $-40 \pm 2^\circ\text{C}$ .   |                           |
|                              | Dry heat                                   | Insulation resistance  | $C \leq 0.33 \mu\text{F}$<br>$3,000\text{M}$ or more<br><hr style="width: 50%; margin: 0;"/> $C > 0.33 \mu\text{F}$<br>$1,000 \text{ F}$ or more |   | Measured at $105 \pm 2$ . |
| Capacitance change           |  | Within +0, -4% of the initial value.   |  |   |                           |

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|------------------------------------|--|--|---------------------------|
| Item                               | Characteristics                            | Test conditions  |                           |
| Humidity resistance (steady state) | Appearance                                 | No visible damage.   |                           |
|                                    | Dielectric strength (Between terminations) | No breakdown.  |                           |
|                                    | Insulation resistance                      | $C \leq 0.33 \mu\text{F}$<br>$10,000\text{M}$ or more<br><hr style="border-top: 1px dashed black;"/> $C > 0.33 \mu\text{F}$<br>$3,000 \text{ F}$ or more |                           |
|                                    | Tangent of loss angle                      | 0.0005 or less   |                           |
|                                    | Capacitance change                         | Within $\pm 5\%$ of the initial value.   |                           |
| Endurance test for humidity (I)    | Appearance                                 | No visible damage.   |                           |
|                                    | Dielectric strength (Between terminations) | No breakdown.  |                           |
|                                    | Insulation resistance                      | $C \leq 0.33 \mu\text{F}$<br>$10,000\text{M}$ or more<br><hr style="border-top: 1px dashed black;"/> $C > 0.33 \mu\text{F}$<br>$3,000 \text{ F}$ or more |                           |
|                                    | Tangent of loss angle                      | 0.0005 or less   |                           |
|                                    | Capacitance change                         | Within $\pm 5\%$ of the initial value.   |                           |
| Endurance test for humidity (II)   | Appearance                                 | No visible damage.   |                           |
|                                    | Dielectric strength (Between terminations) | No breakdown.  |                           |
|                                    | Insulation resistance                      | $C \leq 0.33 \mu\text{F}$<br>$5,000\text{M}$ or more<br><hr style="border-top: 1px dashed black;"/> $C > 0.33 \mu\text{F}$<br>$1,500 \text{ F}$ or more  |                           |
|                                    | Tangent of loss angle                      | 0.0008 or less   |                           |
|                                    | Capacitance change                         | Within $\pm 7\%$ of the initial value.   |                           |

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|-------------------------------------|--|---|-----------------|--|--|------|-------------|----------------|---|---------------------------|----------------|---|------------------|----------|---|----------------------------|----------------|---|------------------|----------|
| Item                                |  | Characteristics                         |                 | Test conditions  |  |      |             |                |   |                           |                |   |                  |          |   |                            |                |   |                  |          |
| Endurance test for high temperature | Appearance                             | No visible damage.                      |                 | The voltage of 125% of rated voltage shall be continuously applied to the capacitor through a series of 20~1,000 per 1 voltage in the test chamber at $105 \pm 3$ for $1,000 \pm 4\%$ hours.   |  |      |             |                |   |                           |                |   |                  |          |   |                            |                |   |                  |          |
|                                     | Insulation resistance                  | $C \leq 0.33 \mu\text{F}$               | 15,000M or more |  |  |      |             |                |   |                           |                |   |                  |          |   |                            |                |   |                  |          |
|                                     |  | $C > 0.33 \mu\text{F}$                  | 5,000 F or more |  |  |      |             |                |   |                           |                |   |                  |          |   |                            |                |   |                  |          |
|                                     | Tangent of loss angle                  | 0.0008 or less                          |                 |  |  |      |             |                |   |                           |                |   |                  |          |   |                            |                |   |                  |          |
| Capacitance change                  | Within $\pm 5\%$ of the initial value. |   |                 |  |  |      |             |                |   |                           |                |   |                  |          |   |                            |                |   |                  |          |
| Rapid change of temperature         | Appearance                             | No visible damage.                      |                 | The capacitors shall be maintained in following temperature the table.1 for 5 cycles.<br><br>Table.1   |  |      |             |                |   |                           |                |   |                  |          |   |                            |                |   |                  |          |
|                                     | Insulation resistance                  | $C \leq 0.33 \mu\text{F}$               | 15,000M or more |  |  |      |             |                |   |                           |                |   |                  |          |   |                            |                |   |                  |          |
|                                     |  | $C > 0.33 \mu\text{F}$                  | 5,000 F or more |  |  |      |             |                |   |                           |                |   |                  |          |   |                            |                |   |                  |          |
|                                     | Tangent of loss angle                  | 0.0008 or less                          |                 |  |  |      |             |                |   |                           |                |   |                  |          |   |                            |                |   |                  |          |
| Capacitance change                  | Within $\pm 5\%$ of the initial value. |   |                 |  |  |      |             |                |   |                           |                |   |                  |          |   |                            |                |   |                  |          |
|                                     |  |   |                 | <table border="1"> <thead> <tr> <th>Step</th> <th>Temperature</th> <th>Maintaind time</th> </tr> </thead> <tbody> <tr> <td>1</td> <td><math>-40 \pm 2^\circ\text{C}</math></td> <td><math>30 \pm 3</math> min</td> </tr> <tr> <td>2</td> <td>room temperature</td> <td>3Min max</td> </tr> <tr> <td>3</td> <td><math>+105 \pm 3^\circ\text{C}</math></td> <td><math>30 \pm 3</math> min</td> </tr> <tr> <td>4</td> <td>room temperature</td> <td>3Min max</td> </tr> </tbody> </table> |  | Step | Temperature | Maintaind time | 1 | $-40 \pm 2^\circ\text{C}$ | $30 \pm 3$ min | 2 | room temperature | 3Min max | 3 | $+105 \pm 3^\circ\text{C}$ | $30 \pm 3$ min | 4 | room temperature | 3Min max |
| Step                                | Temperature                            | Maintaind time                          |                 |  |  |      |             |                |   |                           |                |   |                  |          |   |                            |                |   |                  |          |
| 1                                   | $-40 \pm 2^\circ\text{C}$              | $30 \pm 3$ min                          |                 |  |  |      |             |                |   |                           |                |   |                  |          |   |                            |                |   |                  |          |
| 2                                   | room temperature                       | 3Min max                                |                 |  |  |      |             |                |   |                           |                |   |                  |          |   |                            |                |   |                  |          |
| 3                                   | $+105 \pm 3^\circ\text{C}$             | $30 \pm 3$ min                          |                 |  |  |      |             |                |   |                           |                |   |                  |          |   |                            |                |   |                  |          |
| 4                                   | room temperature                       | 3Min max                                |                 |  |  |      |             |                |   |                           |                |   |                  |          |   |                            |                |   |                  |          |

#### 14. REGULATION IN USAGE

##### 14.1 Voltage derating for frequency

14.1.1 A.C.maximum operating voltage in case of operating with commercial frequency (50 or 60Hz) is as shown in the table below. However, it can not be used for "Across-the-line" application.

| Rated voltage | A.C.maximum operating voltage |
|---------------|-------------------------------|
| 250V.DC       | 125Vrms                       |
| 315V.DC       | 150Vrms                       |
| 400V.DC       | 200Vrms                       |
| 450V.DC       | 200Vrms                       |
| 630V.DC       | 250Vrms                       |
| 800V.DC       | 250Vrms                       |
| 1000V.DC      | 300Vrms                       |
| 1250V.DC      | 400Vrms                       |
| 1600V.DC      | 500Vrms                       |

14.1.2 When containing a portion of D.C.Bias, the crasy value (peak voltage  $V_{o-p}$ ) waveform shall not exceed the rated voltage.

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SPEC

P S C 3 1 7 0 0 0

## 14.2 Permissible current to frequency

A permissible current is regulated by both a root-mean-square value current and a peak current. A root-mean-square value current is to be a permissible current value to frequency attached. A permissible peak current is determined by a permissible peak current value attached.

The values of continuous peak current in the allowable peak current shall be those of continuous current, and the values of single peak current shall be those of discontinuous current such as rush current in switching on or off. The highest number of times of single peak current shall be limited to 10,000 times. (In case of exceeding 10,000 times, please contact us.)

## 14.3 Soldering

When soldering a capacitor, heat in soldering is conducted to the elements of the capacitor from lead wire and an enclosure, and hence it should be noted that soldering under high temperature and a long period may cause deterioration of characteristic or breakdown of capacitors.

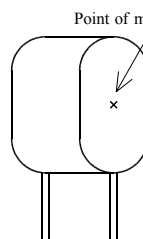
When mounting a capacitor together with chip components, it shall be carried out after curing an adhesive for chip components.

## (1) When subjecting a capacitor to flow soldering

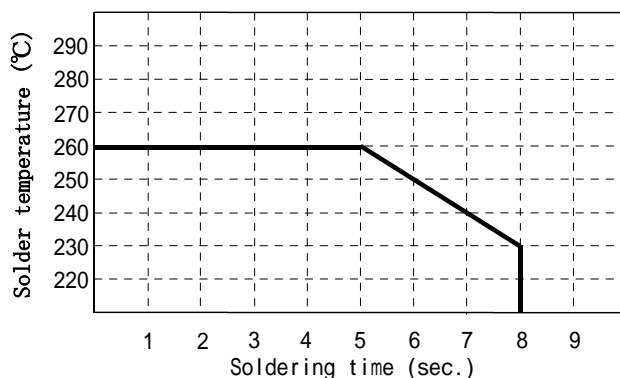
Using a capacitor with formed leads is recommended when subjecting a capacitor to flow soldering.

When using a capacitor with straight leads or using a capacitor under the following circumstances for reasons of mounting, the temperature of the capacitor's innards in soldering (temperature of the point of measurement shown below) shall be 140 or less.

- When using a double-sided through-hole substrate.
- Where other components are installed around a capacitor and heat is trapped.
- When mounting a capacitor in a place near the edge of a substrate.



※Temperature measurements shall be made by inserting by about 2mm the tip of a thermo couple having a diameter of 0.2mm or less into a hole made in an outer covering.



Preheating condition : 120°C,  
for one minute

## (2) When using soldering iron

Iron tip temperature less than 350

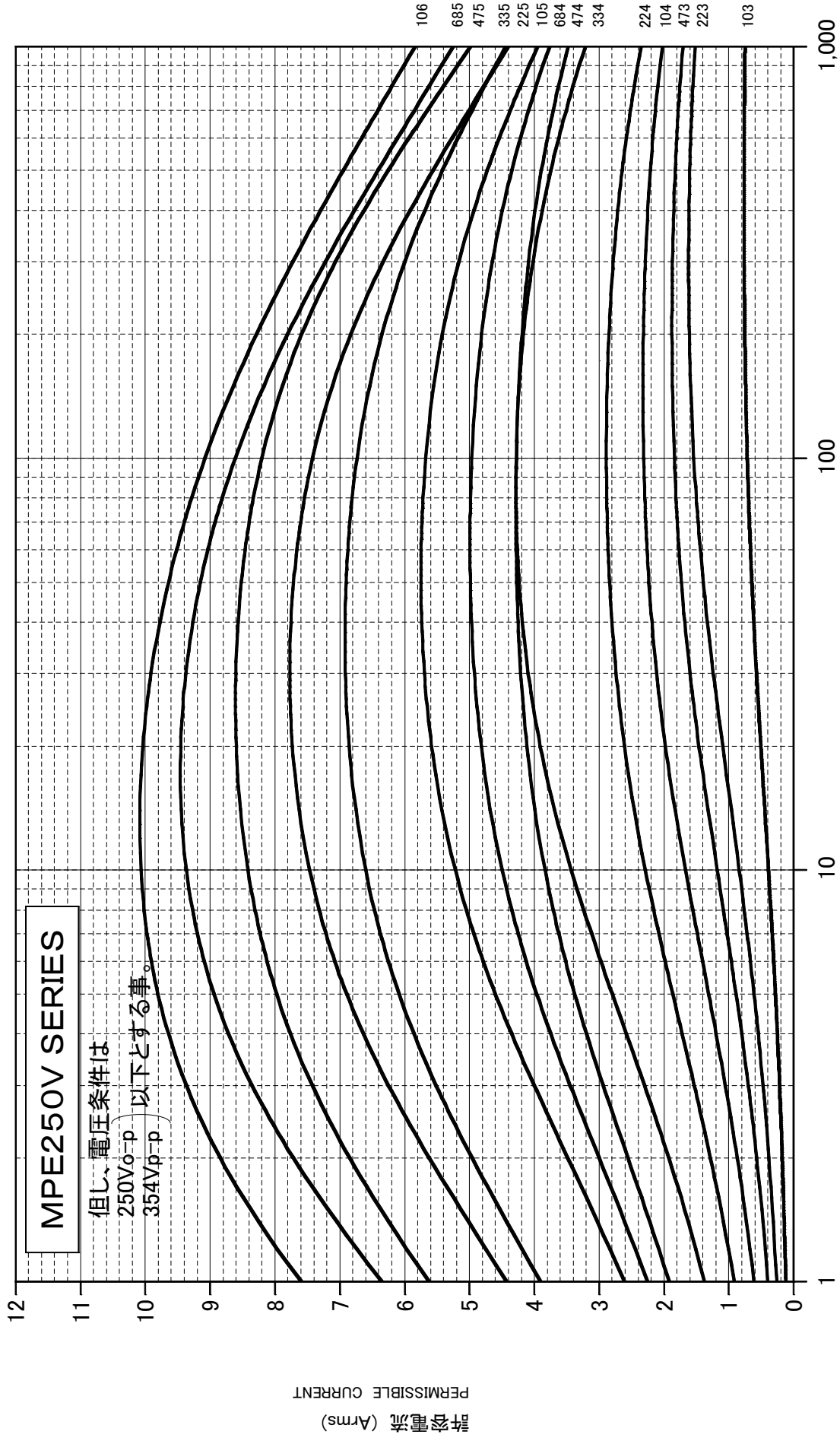
Soldering time (sec.) within 3 seconds

## (3) When soldering a capacitor mounted on the board with chip-type components

Please avoid mounting a capacitor with chip-type components on a printed circuit board because the application of hardening heat for bonding chip components shall cause deterioration of the dielectric film.

# 周波数に対する許容電流特性

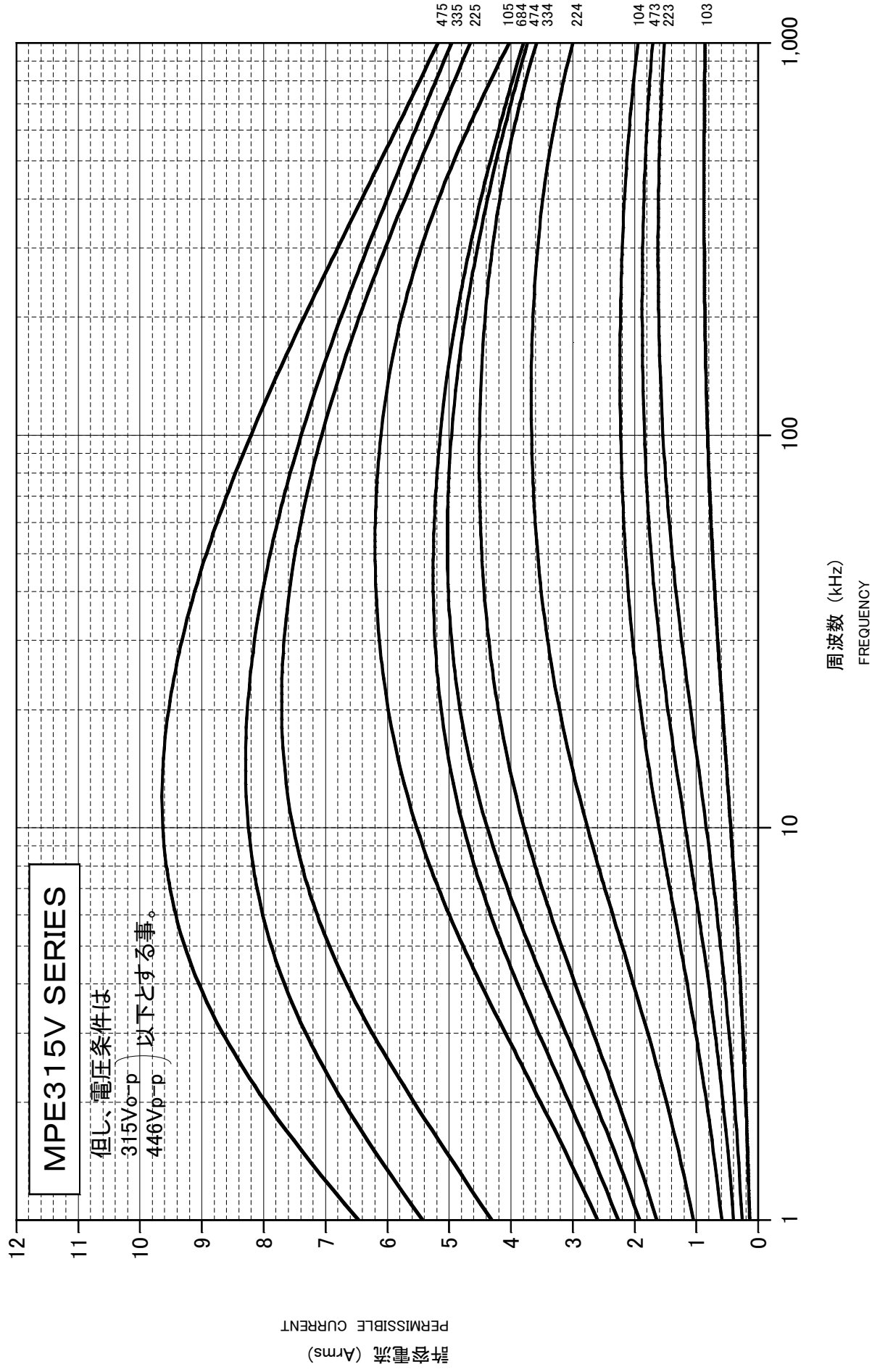
CHARACTERISTICS OF PERMISSIBLE CURRENT TO FREQUENCY





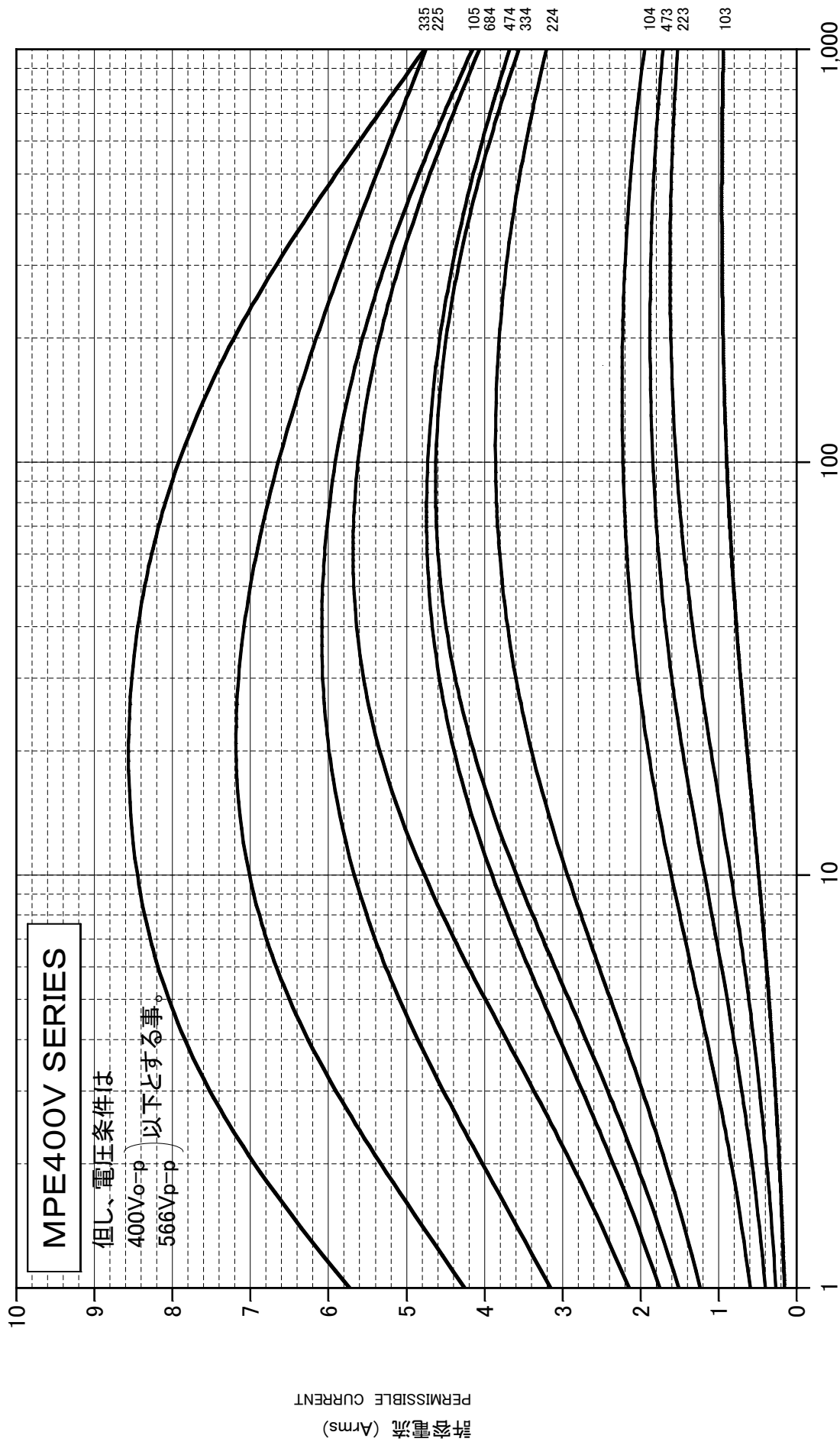
# 周波数に対する許容電流特性

CHARACTERISTICS OF PERMISSIBLE CURRENT TO FREQUENCY



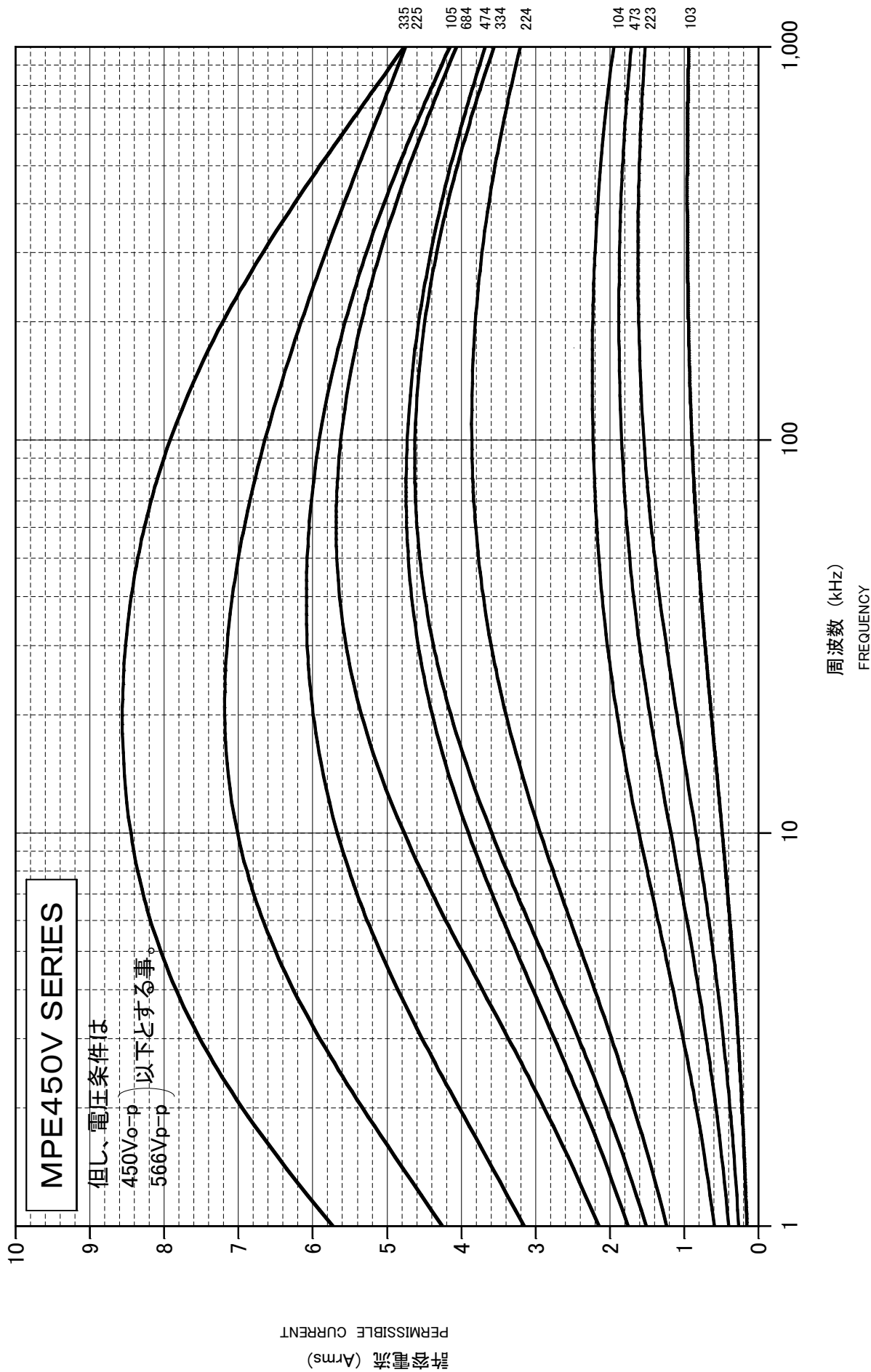
# 周波数に対する許容電流特性

CHARACTERISTICS OF PERMISSIBLE CURRENT TO FREQUENCY



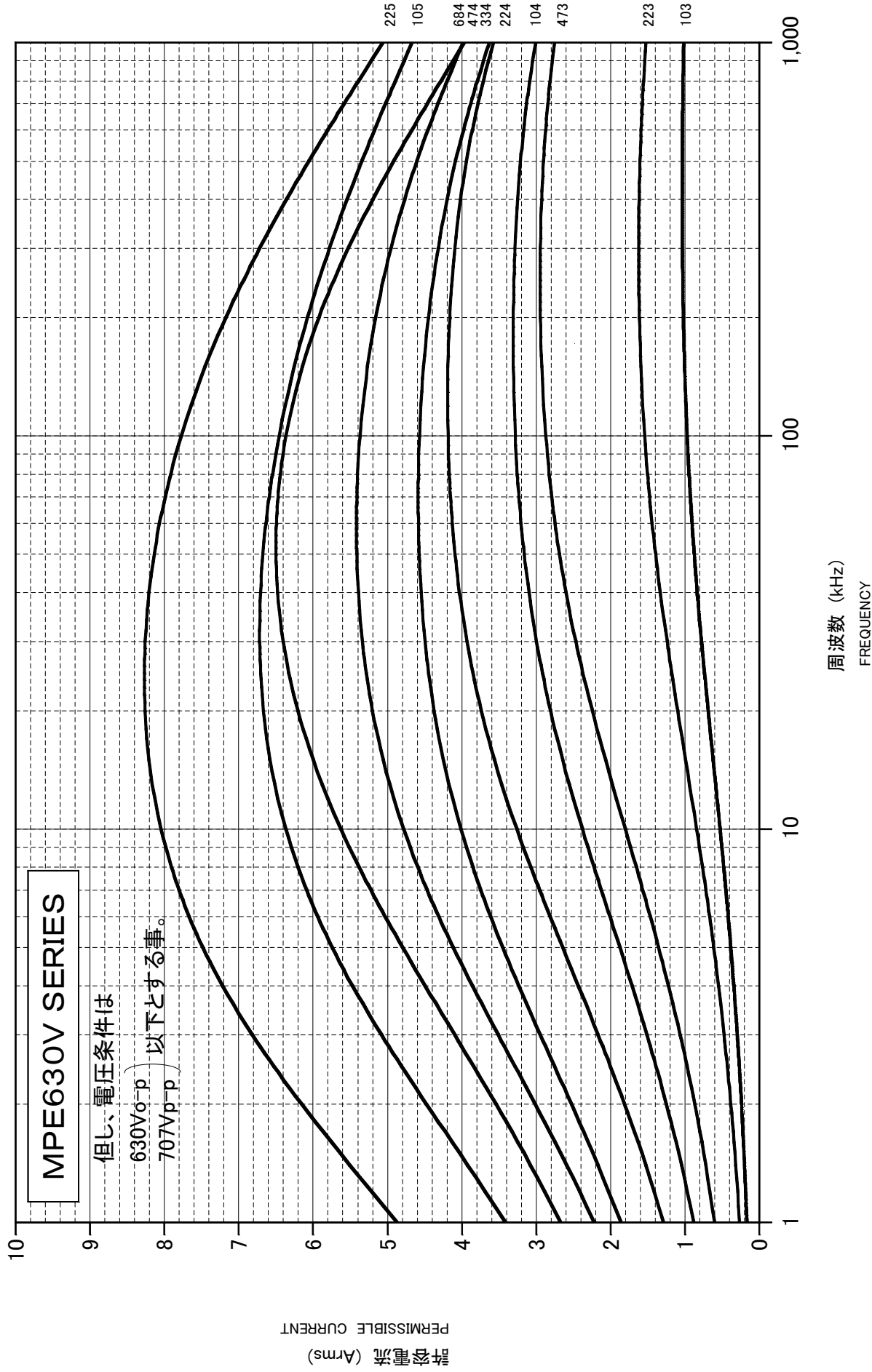
# 周波数に対する許容電流特性

CHARACTERISTICS OF PERMISSIBLE CURRENT TO FREQUENCY



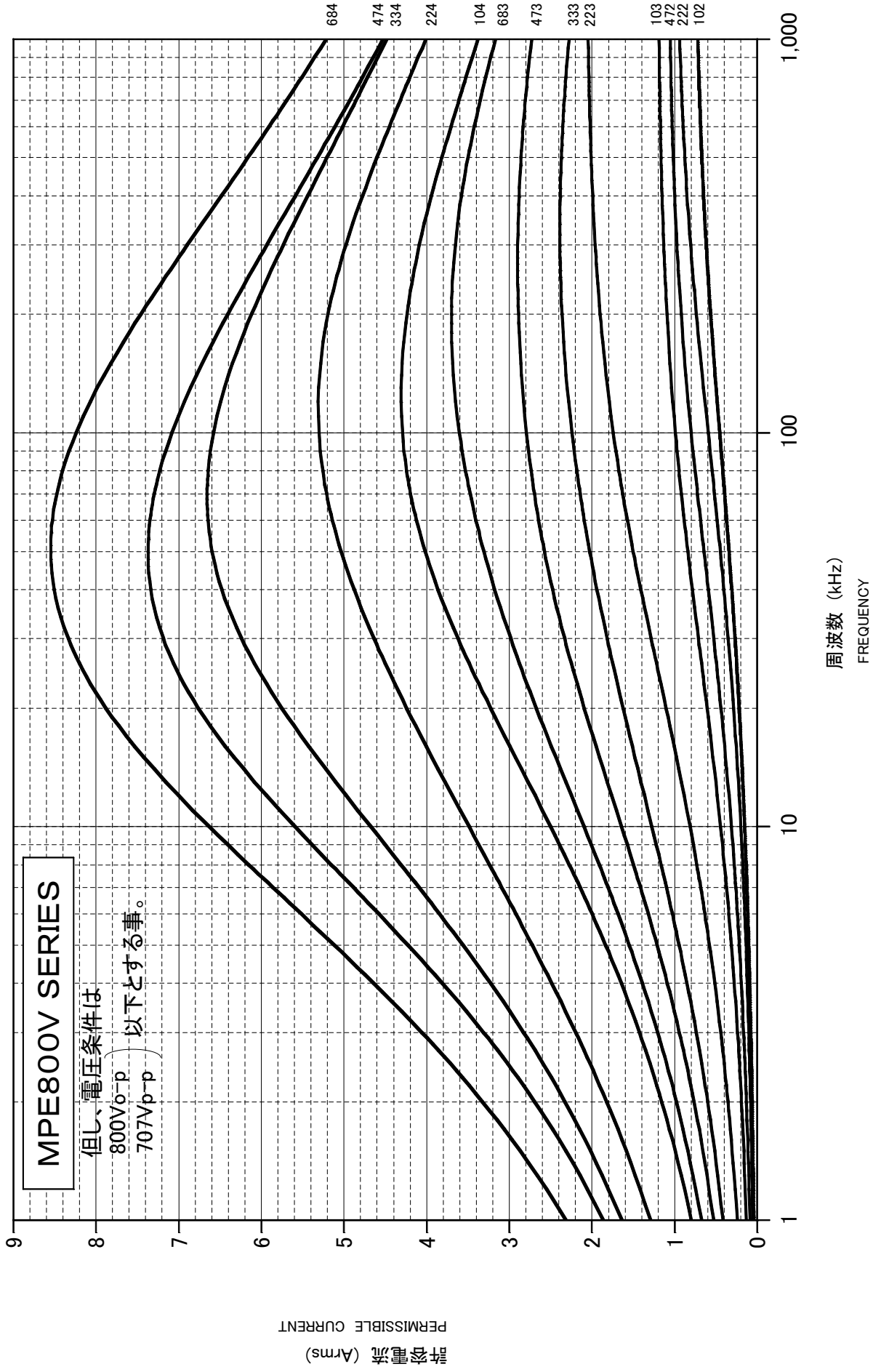
# 周波数に対する許容電流特性

CHARACTERISTICS OF PERMISSIBLE CURRENT TO FREQUENCY



# 周波数に対する許容電流特性

CHARACTERISTICS OF PERMISSIBLE CURRENT TO FREQUENCY

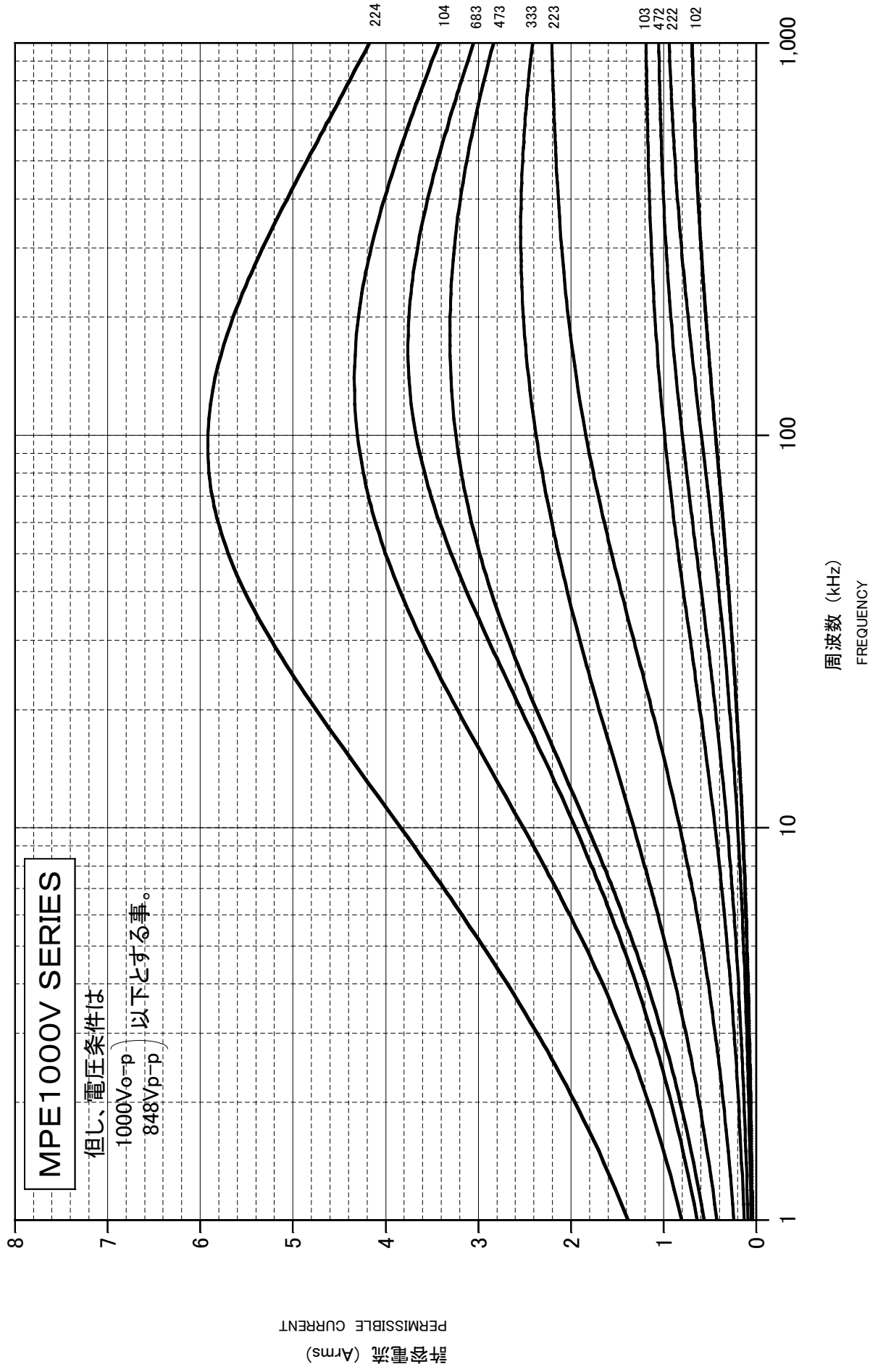


許容電流 (Arms)  
PERMISSIBLE CURRENT

周波数 (kHz)  
FREQUENCY

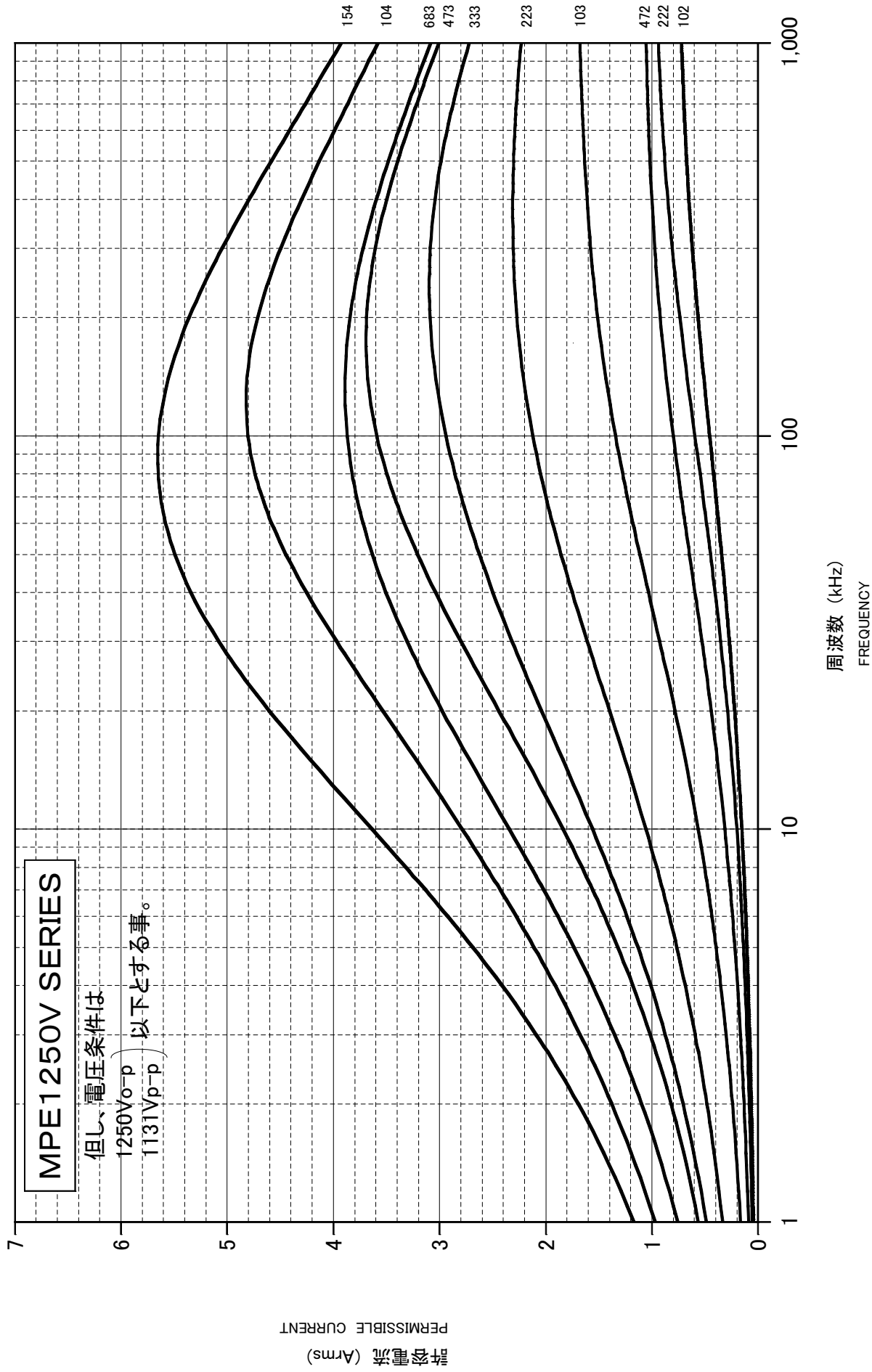
# 周波数に対する許容電流特性

CHARACTERISTICS OF PERMISSIBLE CURRENT TO FREQUENCY



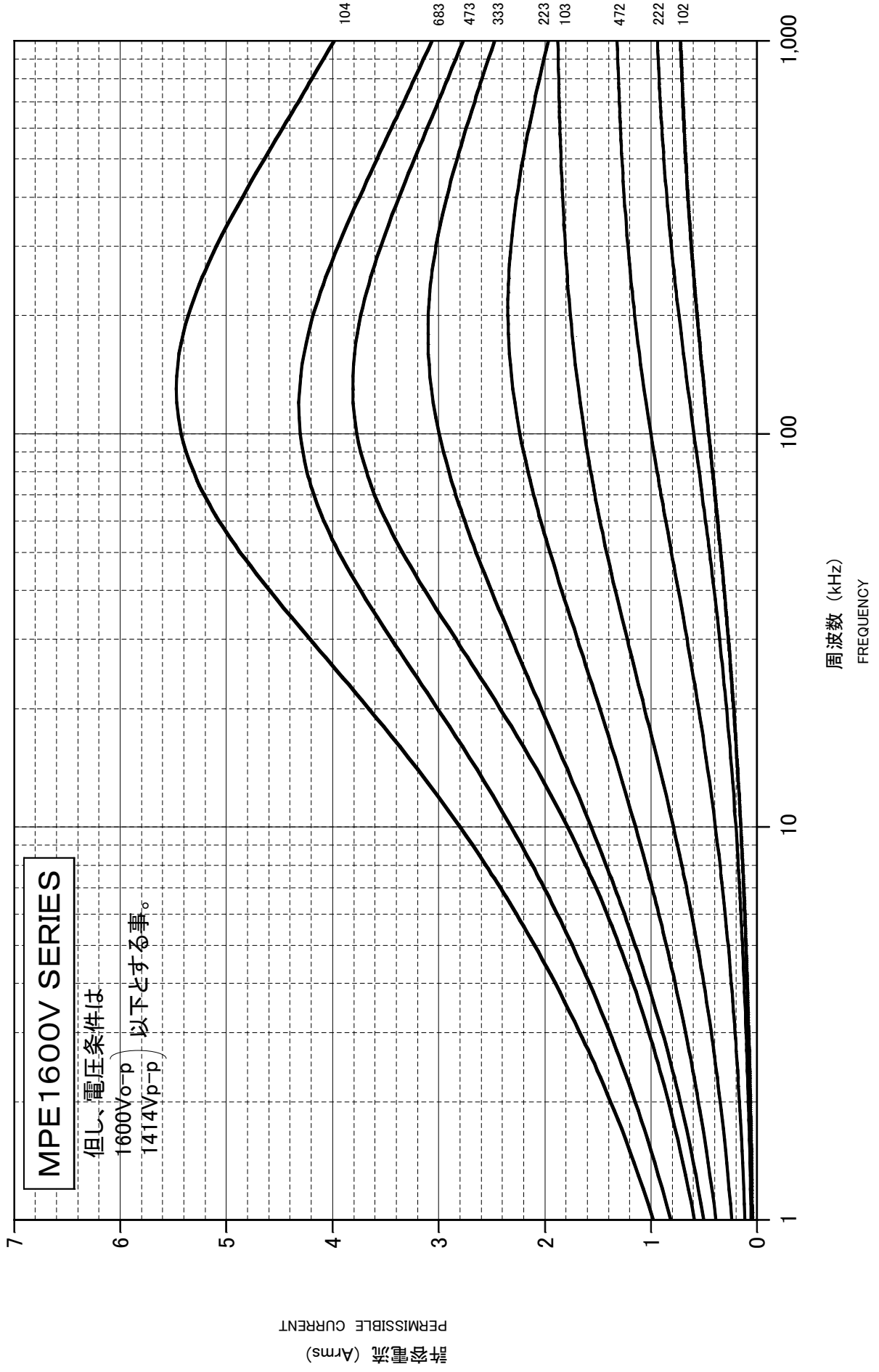
# 周波数に対する許容電流特性

CHARACTERISTICS OF PERMISSIBLE CURRENT TO FREQUENCY



# 周波数に対する許容電流特性

CHARACTERISTICS OF PERMISSIBLE CURRENT TO FREQUENCY







## 許容ピーク電流値 (パルス電流) Permissible Peak Current (Pulse Current)

## Type MPE

| 容量記号<br>Capacitance<br>Symbol | 静電容量<br>Capacitance<br>( $\mu$ F) | 800V.dc                |                           | 1000V.dc               |                           | 1250V.dc               |                           | 1600V.dc               |                           |
|-------------------------------|-----------------------------------|------------------------|---------------------------|------------------------|---------------------------|------------------------|---------------------------|------------------------|---------------------------|
|                               |                                   | 単発<br>Single<br>(Ao-p) | 連続<br>Continual<br>(Ao-p) | 単発<br>Single<br>(Ao-p) | 連続<br>Continual<br>(Ao-p) | 単発<br>Single<br>(Ao-p) | 連続<br>Continual<br>(Ao-p) | 単発<br>Single<br>(Ao-p) | 連続<br>Continual<br>(Ao-p) |
| 102                           | 0.0010                            | 7.84                   | 3.92                      | 7.84                   | 3.92                      | 7.84                   | 3.92                      | 7.84                   | 3.92                      |
| 112                           | 0.0011                            | 8.43                   | 4.21                      | 8.43                   | 4.21                      | 8.43                   | 4.21                      | 8.43                   | 4.21                      |
| 122                           | 0.0012                            | 8.99                   | 4.50                      | 8.99                   | 4.50                      | 8.99                   | 4.50                      | 8.99                   | 4.50                      |
| 132                           | 0.0013                            | 9.55                   | 4.78                      | 9.55                   | 4.78                      | 9.55                   | 4.78                      | 9.55                   | 4.78                      |
| 152                           | 0.0015                            | 10.63                  | 5.32                      | 10.63                  | 5.32                      | 10.63                  | 5.32                      | 10.63                  | 5.32                      |
| 162                           | 0.0016                            | 11.16                  | 5.58                      | 11.16                  | 5.58                      | 11.16                  | 5.58                      | 11.16                  | 5.58                      |
| 182                           | 0.0018                            | 12.19                  | 6.10                      | 12.19                  | 6.10                      | 12.19                  | 6.10                      | 12.19                  | 6.10                      |
| 202                           | 0.002                             | 13.19                  | 6.60                      | 13.19                  | 6.60                      | 13.19                  | 6.60                      | 13.19                  | 6.60                      |
| 222                           | 0.0022                            | 14.17                  | 7.09                      | 14.17                  | 7.09                      | 14.17                  | 7.09                      | 14.17                  | 7.09                      |
| 242                           | 0.0024                            | 15.13                  | 7.56                      | 15.13                  | 7.56                      | 15.13                  | 7.56                      | 15.13                  | 7.56                      |
| 272                           | 0.0027                            | 7.55                   | 3.78                      | 7.55                   | 3.78                      | 7.55                   | 3.78                      | 7.55                   | 3.78                      |
| 302                           | 0.0030                            | 8.17                   | 4.09                      | 8.17                   | 4.09                      | 8.17                   | 4.09                      | 8.17                   | 4.09                      |
| 332                           | 0.0033                            | 8.78                   | 4.39                      | 8.78                   | 4.39                      | 8.78                   | 4.39                      | 8.78                   | 4.39                      |
| 362                           | 0.0036                            | 9.37                   | 4.69                      | 9.37                   | 4.69                      | 9.37                   | 4.69                      | 9.37                   | 4.69                      |
| 392                           | 0.0039                            | 9.95                   | 4.98                      | 9.95                   | 4.98                      | 9.95                   | 4.98                      | 9.95                   | 4.98                      |
| 432                           | 0.0043                            | 10.71                  | 5.35                      | 10.71                  | 5.35                      | 10.71                  | 5.35                      | 10.71                  | 5.35                      |
| 472                           | 0.0047                            | 11.45                  | 5.72                      | 11.45                  | 5.72                      | 11.45                  | 5.72                      | 11.45                  | 5.72                      |
| 512                           | 0.0051                            | 12.17                  | 6.09                      | 12.17                  | 6.09                      | 12.17                  | 6.09                      | 12.17                  | 6.09                      |
| 562                           | 0.0056                            | 9.79                   | 4.90                      | 9.79                   | 4.90                      | 9.79                   | 4.90                      | 13.05                  | 6.53                      |
| 622                           | 0.0062                            | 10.57                  | 5.28                      | 10.57                  | 5.28                      | 10.57                  | 5.28                      | 14.09                  | 7.05                      |
| 682                           | 0.0068                            | 11.33                  | 5.66                      | 11.33                  | 5.66                      | 11.33                  | 5.66                      | 15.10                  | 7.55                      |
| 752                           | 0.0075                            | 12.19                  | 6.09                      | 12.19                  | 6.09                      | 12.19                  | 6.09                      | 16.25                  | 8.13                      |
| 822                           | 0.0082                            | 10.14                  | 5.07                      | 10.14                  | 5.07                      | 13.03                  | 6.52                      | 17.38                  | 8.69                      |
| 912                           | 0.0091                            | 10.96                  | 5.48                      | 10.96                  | 5.48                      | 14.09                  | 7.05                      | 18.79                  | 9.39                      |
| 103                           | 0.010                             | 11.76                  | 5.88                      | 11.76                  | 5.88                      | 15.12                  | 7.56                      | 11.76                  | 5.88                      |
| 113                           | 0.011                             | 12.64                  | 6.32                      | 12.64                  | 6.32                      | 16.25                  | 8.12                      | 12.64                  | 6.32                      |
| 123                           | 0.012                             | 13.49                  | 6.74                      | 13.49                  | 6.74                      | 17.34                  | 8.67                      | 13.49                  | 6.74                      |
| 133                           | 0.013                             | 14.32                  | 7.16                      | 14.32                  | 7.16                      | 18.41                  | 9.21                      | 14.32                  | 7.16                      |
| 153                           | 0.015                             | 13.67                  | 6.83                      | 15.94                  | 7.97                      | 20.50                  | 10.25                     | 15.94                  | 7.97                      |
| 163                           | 0.016                             | 14.34                  | 7.17                      | 16.74                  | 8.37                      | 21.52                  | 10.76                     | 16.74                  | 8.37                      |
| 183                           | 0.018                             | 15.67                  | 7.83                      | 18.28                  | 9.14                      | 13.71                  | 6.86                      | 18.28                  | 9.14                      |
| 203                           | 0.020                             | 16.96                  | 8.48                      | 19.78                  | 9.89                      | 14.84                  | 7.42                      | 19.78                  | 9.89                      |
| 223                           | 0.022                             | 18.21                  | 9.11                      | 21.25                  | 10.63                     | 15.94                  | 7.97                      | 15.00                  | 7.50                      |
| 243                           | 0.024                             | 19.44                  | 9.72                      | 22.68                  | 11.34                     | 17.01                  | 8.51                      | 16.01                  | 8.01                      |
| 273                           | 0.027                             | 21.24                  | 10.62                     | 24.78                  | 12.39                     | 18.58                  | 9.29                      | 17.49                  | 8.75                      |
| 303                           | 0.030                             | 22.98                  | 11.49                     | 26.82                  | 13.41                     | 20.11                  | 10.06                     | 18.93                  | 9.46                      |
| 333                           | 0.033                             | 14.40                  | 7.20                      | 16.80                  | 8.40                      | 21.60                  | 10.80                     | 20.33                  | 10.17                     |
| 363                           | 0.036                             | 15.37                  | 7.69                      | 17.93                  | 8.97                      | 23.06                  | 11.53                     | 21.70                  | 10.85                     |
| 393                           | 0.039                             | 16.32                  | 8.16                      | 19.04                  | 9.52                      | 24.49                  | 12.24                     | 23.04                  | 11.52                     |
| 433                           | 0.043                             | 17.56                  | 8.78                      | 20.49                  | 10.25                     | 26.35                  | 13.17                     | 24.80                  | 12.40                     |
| 473                           | 0.047                             | 18.78                  | 9.39                      | 21.90                  | 10.95                     | 28.16                  | 14.08                     | 26.51                  | 13.25                     |
| 513                           | 0.051                             | 19.96                  | 9.98                      | 23.29                  | 11.64                     | 29.94                  | 14.97                     | 28.18                  | 14.09                     |
| 563                           | 0.056                             | 21.41                  | 10.71                     | 24.98                  | 12.49                     | 22.67                  | 11.34                     | 30.23                  | 15.11                     |
| 623                           | 0.062                             | 23.11                  | 11.56                     | 26.96                  | 13.48                     | 24.47                  | 12.23                     | 32.63                  | 16.31                     |
| 683                           | 0.068                             | 24.77                  | 12.38                     | 28.90                  | 14.45                     | 26.23                  | 13.11                     | 34.97                  | 17.48                     |
| 753                           | 0.075                             | 26.66                  | 13.33                     | 31.10                  | 15.55                     | 28.22                  | 14.11                     | 37.63                  | 18.82                     |
| 823                           | 0.082                             | 28.50                  | 14.25                     | 33.25                  | 16.63                     | 30.18                  | 15.09                     | 40.24                  | 20.12                     |
| 913                           | 0.091                             | 30.82                  | 15.41                     | 35.95                  | 17.98                     | 32.63                  | 16.32                     | 43.51                  | 21.75                     |
| 104                           | 0.10                              | 33.08                  | 16.54                     | 38.59                  | 19.29                     | 35.02                  | 17.51                     | 46.70                  | 23.35                     |
| 114                           | 0.11                              | 25.08                  | 12.54                     | 29.26                  | 14.63                     | 37.62                  | 18.81                     |                        |                           |
| 124                           | 0.12                              | 26.77                  | 13.38                     | 31.23                  | 15.62                     | 40.15                  | 20.08                     |                        |                           |
| 134                           | 0.13                              | 28.43                  | 14.21                     | 33.16                  | 16.58                     | 42.64                  | 21.32                     |                        |                           |
| 154                           | 0.15                              | 31.65                  | 15.82                     | 36.92                  | 18.46                     | 47.47                  | 23.73                     |                        |                           |
| 164                           | 0.16                              | 33.22                  | 16.61                     | 38.75                  | 19.38                     | 49.82                  | 24.91                     |                        |                           |
| 184                           | 0.18                              | 36.28                  | 18.14                     | 42.33                  | 21.16                     | 54.42                  | 27.21                     |                        |                           |
| 204                           | 0.20                              | 39.27                  | 19.63                     | 45.81                  | 22.91                     |                        |                           |                        |                           |
| 224                           | 0.22                              | 42.18                  | 21.09                     | 49.20                  | 24.60                     |                        |                           |                        |                           |
| 244                           | 0.24                              | 45.02                  | 22.51                     |                        |                           |                        |                           |                        |                           |
| 274                           | 0.27                              | 49.18                  | 24.59                     |                        |                           |                        |                           |                        |                           |
| 304                           | 0.30                              | 53.22                  | 26.61                     |                        |                           |                        |                           |                        |                           |
| 334                           | 0.33                              | 57.17                  | 28.58                     |                        |                           |                        |                           |                        |                           |
| 364                           | 0.36                              | 61.02                  | 30.51                     |                        |                           |                        |                           |                        |                           |
| 394                           | 0.39                              | 64.80                  | 32.40                     |                        |                           |                        |                           |                        |                           |
| 434                           | 0.43                              | 69.72                  | 34.86                     |                        |                           |                        |                           |                        |                           |
| 474                           | 0.47                              | 74.53                  | 37.26                     |                        |                           |                        |                           |                        |                           |
| 514                           | 0.51                              | 79.24                  | 39.62                     |                        |                           |                        |                           |                        |                           |
| 564                           | 0.56                              | 84.99                  | 42.50                     |                        |                           |                        |                           |                        |                           |
| 624                           | 0.62                              | 91.74                  | 45.87                     |                        |                           |                        |                           |                        |                           |
| 684                           | 0.68                              | 98.32                  | 49.16                     |                        |                           |                        |                           |                        |                           |

SPECIFICATION

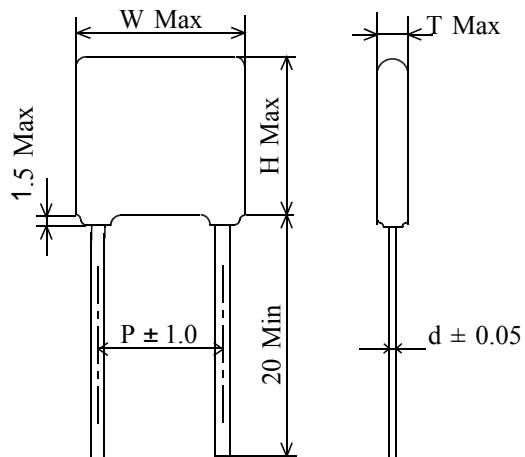
METALLIZED POLYPROPYLENE FILM CAPACITOR

SPEC

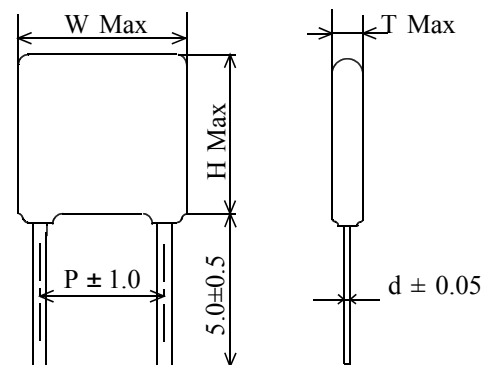
P S C 3 1 7 0 0 0

## Drawing of dimension

• M P E : Straight lead type

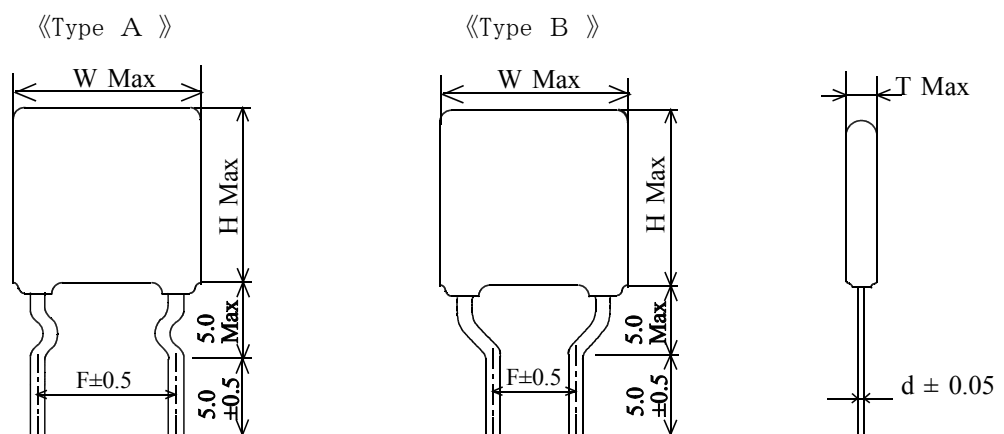


• M P E C : Cut lead type



※ 2.0mmMax, when dimension of H are more than 20mm.

• M P E F : Single-formed lead type



|               |   |                   |
|---------------|---|-------------------|
| SPECIFICATION | METALLIZED POLYPROPYLENE FILM CAPACITOR | SPEC              |
|               |   | P S C 3 1 7 0 0 0 |

MPE, MPEF, MPEC-250V.DC

| Parts No.        | Capacitance<br>( $\mu$ F) | Dimensions (mm) |      |     |      |     |   |      |   |   |     |
|------------------|---------------------------|-----------------|------|-----|------|-----|---|------|---|---|-----|
|                  |                           | W               | H    | T   | P    | F   |   | F    |   | F | d   |
| MPE 0250 1030000 | 0.010                     | 13.0            | 9.0  | 5.5 | 10.0 | 7.5 | A | 10.0 | A |   | 0.6 |
| MPE 0250 1130000 | 0.011                     | "               | "    | "   | "    | "   | " | "    | " | " | "   |
| MPE 0250 1230000 | 0.012                     | "               | "    | "   | "    | "   | " | "    | " | " | "   |
| MPE 0250 1330000 | 0.013                     | "               | 9.5  | "   | "    | "   | " | "    | " | " | "   |
| MPE 0250 1530000 | 0.015                     | "               | "    | 6.0 | "    | "   | " | "    | " | " | "   |
| MPE 0250 1630000 | 0.016                     | "               | "    | "   | "    | "   | " | "    | " | " | "   |
| MPE 0250 1830000 | 0.018                     | "               | 10.0 | "   | "    | "   | " | "    | " | " | "   |
| MPE 0250 2030000 | 0.020                     | "               | "    | 6.5 | "    | "   | " | "    | " | " | "   |
| MPE 0250 2230000 | 0.022                     | "               | 10.5 | "   | "    | "   | " | "    | " | " | "   |
| MPE 0250 2430000 | 0.024                     | "               | "    | 7.0 | "    | "   | " | "    | " | " | "   |
| MPE 0250 2730000 | 0.027                     | "               | "    | "   | "    | "   | " | "    | " | " | "   |
| MPE 0250 3030000 | 0.030                     | "               | 11.0 | 7.5 | "    | "   | " | "    | " | " | "   |
| MPE 0250 3330000 | 0.033                     | "               | 9.0  | 5.5 | "    | "   | " | "    | " | " | "   |
| MPE 0250 3630000 | 0.036                     | "               | 9.5  | "   | "    | "   | " | "    | " | " | "   |
| MPE 0250 3930000 | 0.039                     | "               | "    | 6.0 | "    | "   | " | "    | " | " | "   |
| MPE 0250 4330000 | 0.043                     | "               | "    | "   | "    | "   | " | "    | " | " | "   |
| MPE 0250 4730000 | 0.047                     | "               | 10.0 | "   | "    | "   | " | "    | " | " | "   |
| MPE 0250 5130000 | 0.051                     | "               | "    | 6.5 | "    | "   | " | "    | " | " | "   |
| MPE 0250 5630000 | 0.056                     | "               | "    | "   | "    | "   | " | "    | " | " | "   |
| MPE 0250 6230000 | 0.062                     | "               | 10.5 | "   | "    | "   | " | "    | " | " | "   |
| MPE 0250 6830000 | 0.068                     | "               | "    | 7.0 | "    | "   | " | "    | " | " | "   |
| MPE 0250 7530000 | 0.075                     | "               | 11.0 | "   | "    | "   | " | "    | " | " | "   |
| MPE 0250 8230000 | 0.082                     | "               | "    | 7.5 | "    | "   | " | "    | " | " | "   |
| MPE 0250 9130000 | 0.091                     | "               | 11.5 | "   | "    | "   | " | "    | " | " | "   |
| MPE 0250 1040000 | 0.10                      | 15.5            | 12.0 | 6.5 | 12.5 | "   | B | "    | " | " | "   |
| MPE 0250 1140000 | 0.11                      | "               | "    | 7.0 | "    | "   | " | "    | " | " | "   |
| MPE 0250 1240000 | 0.12                      | "               | 12.5 | "   | "    | "   | " | "    | " | " | "   |
| MPE 0250 1340000 | 0.13                      | "               | "    | 7.5 | "    | "   | " | "    | " | " | "   |
| MPE 0250 1540000 | 0.15                      | "               | 13.0 | "   | "    | "   | " | "    | " | " | "   |
| MPE 0250 1640000 | 0.16                      | "               | "    | 8.0 | "    | "   | " | "    | " | " | "   |
| MPE 0250 1840000 | 0.18                      | "               | 11.5 | 6.0 | "    | "   | " | "    | " | " | "   |
| MPE 0250 2040000 | 0.20                      | "               | "    | 6.5 | "    | "   | " | "    | " | " | "   |
| MPE 0250 2240000 | 0.22                      | "               | 12.0 | "   | "    | "   | " | "    | " | " | "   |
| MPE 0250 2440000 | 0.24                      | "               | "    | 7.0 | "    | "   | " | "    | " | " | "   |
| MPE 0250 2740000 | 0.27                      | "               | 12.5 | "   | "    | "   | " | "    | " | " | "   |
| MPE 0250 3040000 | 0.30                      | "               | "    | 7.5 | "    | "   | " | "    | " | " | "   |
| MPE 0250 3340000 | 0.33                      | "               | 13.0 | "   | "    | "   | " | "    | " | " | "   |
| MPE 0250 3640000 | 0.36                      | "               | 12.0 | 8.5 | "    | "   | " | "    | " | " | "   |

|               |   |                   |  |
|---------------|---|-------------------|--|
| SPECIFICATION | METALLIZED POLYPROPYLENE FILM CAPACITOR | SPEC              |  |
|               |   | P S C 3 1 7 0 0 0 |  |

MPE, MPEF, MPEC-250V.DC

| Parts No.        | Capacitance<br>( $\mu$ F) | Dimensions (mm) |      |      |      |     |   |      |   |      |   |     |
|------------------|---------------------------|-----------------|------|------|------|-----|---|------|---|------|---|-----|
|                  |                           | W               | H    | T    | P    | F   |   | F    |   | F    | d |     |
| MPE 0250 3940000 | 0.39                      | 15.5            | 12.5 | 9.0  | 12.5 | 7.5 | B | 10.0 | A |      |   | 0.6 |
| MPE 0250 4340000 | 0.43                      | "               | 13.0 | "    | "    | "   | " | "    | " |      |   | "   |
| MPE 0250 4740000 | 0.47                      | 20.5            | 13.5 | 7.0  | 17.5 | "   | " | "    | B | 12.5 | B | 0.8 |
| MPE 0250 5140000 | 0.51                      | "               | 14.0 | "    | "    | "   | " | "    | " | "    | " | "   |
| MPE 0250 5640000 | 0.56                      | "               | "    | 7.5  | "    | "   | " | "    | " | "    | " | "   |
| MPE 0250 6240000 | 0.62                      | "               | 14.5 | "    | "    | "   | " | "    | " | "    | " | "   |
| MPE 0250 6840000 | 0.68                      | "               | "    | 8.0  | "    | "   | " | "    | " | "    | " | "   |
| MPE 0250 7540000 | 0.75                      | "               | 15.0 | "    | "    | "   | " | "    | " | "    | " | "   |
| MPE 0250 8240000 | 0.82                      | "               | 15.5 | 8.5  | "    | "   | " | "    | " | "    | " | "   |
| MPE 0250 9140000 | 0.91                      | "               | "    | 9.0  | "    | "   | " | "    | " | "    | " | "   |
| MPE 0250 1050000 | 1.0                       | "               | 16.0 | 9.5  | "    | "   | " | "    | " | "    | " | "   |
| MPE 0250 1150000 | 1.1                       | "               | 16.5 | "    | "    | "   | " | "    | " | "    | " | "   |
| MPE 0250 1250000 | 1.2                       | "               | 17.0 | 10.0 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0250 1350000 | 1.3                       | "               | 17.5 | 10.5 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0250 1550000 | 1.5                       | "               | 18.0 | 11.0 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0250 1650000 | 1.6                       | "               | 18.5 | 11.5 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0250 1850000 | 1.8                       | 25.5            | 19.5 | 9.5  | 22.5 |     |   | 17.5 | " |      |   | "   |
| MPE 0250 2050000 | 2.0                       | "               | 20.0 | 10.0 | "    |     |   | "    | " |      |   | "   |
| MPE 0250 2250000 | 2.2                       | "               | 20.5 | 10.5 | "    |     |   | "    | " |      |   | "   |
| MPE 0250 2450000 | 2.4                       | "               | 21.0 | 11.0 | "    |     |   | "    | " |      |   | "   |
| MPE 0250 2750000 | 2.7                       | "               | 21.5 | 11.5 | "    |     |   | "    | " |      |   | "   |
| MPE 0250 3050000 | 3.0                       | "               | 22.0 | 12.0 | "    |     |   | "    | " |      |   | "   |
| MPE 0250 3350000 | 3.3                       | "               | 22.5 | 12.5 | "    |     |   | "    | " |      |   | "   |
| MPE 0250 3650000 | 3.6                       | 31.0            | 22.0 | "    | 27.5 |     |   | 22.5 | " |      |   | "   |
| MPE 0250 3950000 | 3.9                       | "               | 22.5 | 13.0 | "    |     |   | "    | " |      |   | "   |
| MPE 0250 4350000 | 4.3                       | "               | 23.5 | 13.5 | "    |     |   | "    | " |      |   | "   |
| MPE 0250 4750000 | 4.7                       | "               | 24.0 | 14.0 | "    |     |   | "    | " |      |   | "   |
| MPE 0250 5150000 | 5.1                       | "               | 24.5 | 14.5 | "    |     |   | "    | " |      |   | "   |
| MPE 0250 5650000 | 5.6                       | "               | 25.0 | 15.5 | "    |     |   | "    | " |      |   | "   |
| MPE 0250 6250000 | 6.2                       | "               | 26.0 | 16.0 | "    |     |   | "    | " |      |   | "   |
| MPE 0250 6850000 | 6.8                       | "               | "    | 17.5 | "    |     |   | "    | " |      |   | "   |
| MPE 0250 7550000 | 7.5                       | 37.0            | 25.0 | 16.5 | 32.5 |     |   | 27.5 | " |      |   | "   |
| MPE 0250 8250000 | 8.2                       | "               | 25.5 | 17.0 | "    |     |   | "    | " |      |   | "   |
| MPE 0250 9150000 | 9.1                       | "               | 26.5 | 18.0 | "    |     |   | "    | " |      |   | "   |
| MPE 0250 1060000 | 10.0                      | "               | "    | 20.0 | "    |     |   | "    | " |      |   | "   |

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| SPECIFICATION | METALLIZED POLYPROPYLENE FILM CAPACITOR | SPEC              |
|               |   | P S C 3 1 7 0 0 0 |

MPE, MPEF, MPEC-315V.DC

| Parts No.        | Capacitance<br>( $\mu$ F) | Dimensions (mm) |      |     |      |     |   |      |   |      |   |     |
|------------------|---------------------------|-----------------|------|-----|------|-----|---|------|---|------|---|-----|
|                  |                           | W               | H    | T   | P    | F   |   | F    |   | F    | d |     |
| MPE 0315 1030000 | 0.010                     | 13.0            | 9.0  | 5.5 | 10.0 | 7.5 | A | 10.0 | A |      |   | 0.6 |
| MPE 0315 1130000 | 0.011                     | "               | "    | "   | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 1230000 | 0.012                     | "               | "    | "   | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 1330000 | 0.013                     | "               | 9.5  | "   | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 1530000 | 0.015                     | "               | "    | 6.0 | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 1630000 | 0.016                     | "               | "    | "   | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 1830000 | 0.018                     | "               | 10.0 | "   | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 2030000 | 0.020                     | "               | "    | 6.5 | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 2230000 | 0.022                     | "               | 10.5 | "   | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 2430000 | 0.024                     | "               | "    | 7.0 | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 2730000 | 0.027                     | "               | "    | "   | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 3030000 | 0.030                     | "               | 11.0 | 7.5 | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 3330000 | 0.033                     | "               | 9.0  | 5.5 | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 3630000 | 0.036                     | "               | 9.5  | "   | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 3930000 | 0.039                     | "               | "    | 6.0 | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 4330000 | 0.043                     | "               | "    | "   | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 4730000 | 0.047                     | "               | 10.0 | "   | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 5130000 | 0.051                     | "               | "    | 6.5 | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 5630000 | 0.056                     | "               | "    | "   | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 6230000 | 0.062                     | "               | 10.5 | "   | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 6830000 | 0.068                     | "               | "    | 7.0 | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 7530000 | 0.075                     | "               | 11.0 | "   | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 8230000 | 0.082                     | "               | "    | 7.5 | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 9130000 | 0.091                     | "               | 11.5 | "   | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 1040000 | 0.10                      | 15.5            | 12.0 | 6.5 | 12.5 | "   | B | "    | " |      |   | "   |
| MPE 0315 1140000 | 0.11                      | "               | "    | 7.0 | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 1240000 | 0.12                      | "               | 12.5 | "   | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 1340000 | 0.13                      | "               | "    | 7.5 | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 1540000 | 0.15                      | "               | 13.0 | "   | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 1640000 | 0.16                      | "               | "    | 8.0 | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 1840000 | 0.18                      | "               | 12.5 | 7.0 | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 2040000 | 0.20                      | "               | "    | 7.5 | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 2240000 | 0.22                      | "               | 13.0 | 8.0 | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 2440000 | 0.24                      | "               | 12.5 | 8.5 | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 2740000 | 0.27                      | "               | 13.0 | 9.0 | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 3040000 | 0.30                      | "               | "    | 9.5 | "    | "   | " | "    | " |      |   | "   |
| MPE 0315 3340000 | 0.33                      | 18.5            | 13.5 | 8.0 | 15.0 | "   | " | "    | B | 12.5 | A | 0.8 |
| MPE 0315 3640000 | 0.36                      | "               | "    | 8.5 | "    | "   | " | "    | " | "    | " | "   |

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| SPECIFICATION | METALLIZED POLYPROPYLENE FILM CAPACITOR | SPEC<br>P S C 3 1 7 0 0 0 |
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MPE, MPEF, MPEC-315V.DC

| Parts No.        | Capacitance<br>( $\mu$ F) | Dimensions (mm) |      |      |      |     |   |      |   |      |   |     |
|------------------|---------------------------|-----------------|------|------|------|-----|---|------|---|------|---|-----|
|                  |                           | W               | H    | T    | P    | F   |   | F    |   | F    | d |     |
| MPE 0315 3940000 | 0.39                      | 18.5            | 14.0 | 8.5  | 15.0 | 7.5 | B | 10.0 | B | 12.5 | A | 0.8 |
| MPE 0315 4340000 | 0.43                      | "               | "    | 9.0  | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 4740000 | 0.47                      | "               | 15.5 | 8.5  | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 5140000 | 0.51                      | "               | 16.0 | 9.0  | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 5640000 | 0.56                      | "               | "    | 9.5  | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 6240000 | 0.62                      | 20.5            | "    | 9.0  | 17.5 | "   | " | "    | " | "    | B | "   |
| MPE 0315 6840000 | 0.68                      | "               | 16.5 | 9.5  | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 7540000 | 0.75                      | "               | 17.0 | 10.0 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 8240000 | 0.82                      | "               | "    | 10.5 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 9140000 | 0.91                      | "               | 17.5 | 11.0 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 1050000 | 1.0                       | "               | 18.0 | 11.5 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 1150000 | 1.1                       | 25.5            | "    | 9.5  | 22.5 | "   | " | 17.5 | " | "    | " | "   |
| MPE 0315 1250000 | 1.2                       | "               | 18.5 | 10.0 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 1350000 | 1.3                       | "               | 19.0 | 10.5 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 1550000 | 1.5                       | "               | 19.5 | 11.5 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 1650000 | 1.6                       | "               | 20.0 | "    | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 1850000 | 1.8                       | "               | 20.5 | 12.5 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 2050000 | 2.0                       | "               | 21.5 | 13.0 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 2250000 | 2.2                       | "               | 23.0 | "    | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 2450000 | 2.4                       | 31.0            | 22.5 | 12.5 | 27.5 | "   | " | 22.5 | " | "    | " | "   |
| MPE 0315 2750000 | 2.7                       | "               | 23.0 | 13.5 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 3050000 | 3.0                       | "               | 24.0 | 14.0 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 3350000 | 3.3                       | "               | 24.5 | 14.5 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 3650000 | 3.6                       | "               | 25.5 | 15.5 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 3950000 | 3.9                       | "               | 26.0 | 16.0 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 4350000 | 4.3                       | "               | 26.5 | 17.0 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0315 4750000 | 4.7                       | "               | "    | 18.5 | "    | "   | " | "    | " | "    | " | "   |

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| SPECIFICATION | METALLIZED POLYPROPYLENE FILM CAPACITOR | SPEC              |
|               |   | P S C 3 1 7 0 0 0 |

MPE, MPEF, MPEC-400V.DC

| Parts No.        | Capacitance<br>( $\mu$ F) | Dimensions (mm) |      |     |      |     |    |      |    |      |    |     |
|------------------|---------------------------|-----------------|------|-----|------|-----|----|------|----|------|----|-----|
|                  |                           | W               | H    | T   | P    | F   |    | F    |    | F    | d  |     |
| MPE 0400 1030000 | 0.010                     | 13.0            | 9.0  | 5.5 | 10.0 | 7.5 | A  | 10.0 | A  |      |    | 0.6 |
| MPE 0400 1130000 | 0.011                     | ''              | ''   | ''  | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 1230000 | 0.012                     | ''              | ''   | ''  | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 1330000 | 0.013                     | ''              | 9.5  | ''  | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 1530000 | 0.015                     | ''              | ''   | 6.0 | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 1630000 | 0.016                     | ''              | ''   | ''  | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 1830000 | 0.018                     | ''              | 10.0 | ''  | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 2030000 | 0.020                     | ''              | ''   | 6.5 | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 2230000 | 0.022                     | ''              | 10.5 | ''  | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 2430000 | 0.024                     | ''              | ''   | 7.0 | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 2730000 | 0.027                     | ''              | ''   | ''  | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 3030000 | 0.030                     | ''              | 11.0 | 7.5 | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 3330000 | 0.033                     | ''              | 9.0  | 5.5 | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 3630000 | 0.036                     | ''              | 9.5  | ''  | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 3930000 | 0.039                     | ''              | ''   | 6.0 | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 4330000 | 0.043                     | ''              | ''   | ''  | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 4730000 | 0.047                     | ''              | 10.0 | ''  | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 5130000 | 0.051                     | ''              | ''   | 6.5 | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 5630000 | 0.056                     | ''              | ''   | ''  | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 6230000 | 0.062                     | ''              | 10.5 | ''  | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 6830000 | 0.068                     | ''              | ''   | 7.0 | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 7530000 | 0.075                     | ''              | 11.0 | ''  | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 8230000 | 0.082                     | ''              | ''   | 7.5 | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 9130000 | 0.091                     | ''              | 11.5 | ''  | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 1040000 | 0.10                      | 15.5            | 12.0 | 6.5 | 12.5 | ''  | B  | ''   | '' |      |    | ''  |
| MPE 0400 1140000 | 0.11                      | ''              | ''   | 7.0 | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 1240000 | 0.12                      | ''              | 12.5 | ''  | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 1340000 | 0.13                      | ''              | ''   | 7.5 | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 1540000 | 0.15                      | ''              | 13.0 | ''  | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 1640000 | 0.16                      | ''              | ''   | 8.0 | ''   | ''  | '' | ''   | '' |      |    | ''  |
| MPE 0400 1840000 | 0.18                      | 18.5            | 13.5 | 7.0 | 15.0 | ''  | '' | ''   | B  | 12.5 | A  | 0.8 |
| MPE 0400 2040000 | 0.20                      | ''              | 14.0 | ''  | ''   | ''  | '' | ''   | '' | ''   | '' | ''  |
| MPE 0400 2240000 | 0.22                      | ''              | ''   | 7.5 | ''   | ''  | '' | ''   | '' | ''   | '' | ''  |
| MPE 0400 2440000 | 0.24                      | ''              | 14.5 | ''  | ''   | ''  | '' | ''   | '' | ''   | '' | ''  |
| MPE 0400 2740000 | 0.27                      | ''              | 15.0 | 8.0 | ''   | ''  | '' | ''   | '' | ''   | '' | ''  |
| MPE 0400 3040000 | 0.30                      | ''              | ''   | 8.5 | ''   | ''  | '' | ''   | '' | ''   | '' | ''  |
| MPE 0400 3340000 | 0.33                      | ''              | 15.5 | 9.0 | ''   | ''  | '' | ''   | '' | ''   | '' | ''  |
| MPE 0400 3640000 | 0.36                      | ''              | 16.0 | ''  | ''   | ''  | '' | ''   | '' | ''   | '' | ''  |



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| SPECIFICATION | METALLIZED POLYPROPYLENE FILM CAPACITOR | SPEC<br>P S C 3 1 7 0 0 0 |
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MPE, MPEF, MPEC-400V.DC

| Parts No.        | Capacitance<br>( $\mu$ F) | Dimensions (mm) |      |      |      |     |   |      |   |      |   |     |
|------------------|---------------------------|-----------------|------|------|------|-----|---|------|---|------|---|-----|
|                  |                           | W               | H    | T    | P    | F   | F | F    | F | F    | d |     |
| MPE 0400 3940000 | 0.39                      | 18.5            | 15.5 | 10.0 | 15.0 | 7.5 | B | 10.0 | B | 12.5 | A | 0.8 |
| MPE 0400 4340000 | 0.43                      | "               | 16.0 | 10.5 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0400 4740000 | 0.47                      | 20.5            | 16.5 | 9.5  | 17.5 | "   | " | "    | " | "    | B | "   |
| MPE 0400 5140000 | 0.51                      | "               | "    | 10.0 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0400 5640000 | 0.56                      | "               | 17.0 | 10.5 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0400 6240000 | 0.62                      | "               | 17.5 | 11.0 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0400 6840000 | 0.68                      | "               | "    | 12.0 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0400 7540000 | 0.75                      | "               | 18.0 | 12.5 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0400 8240000 | 0.82                      | 25.5            | 18.5 | 10.0 | 22.5 |     |   | 17.5 | " |      |   | "   |
| MPE 0400 9140000 | 0.91                      | "               | 19.0 | 10.5 | "    |     |   | "    | " |      |   | "   |
| MPE 0400 1050000 | 1.0                       | "               | 19.5 | 11.0 | "    |     |   | "    | " |      |   | "   |
| MPE 0400 1150000 | 1.1                       | "               | 20.0 | 11.5 | "    |     |   | "    | " |      |   | "   |
| MPE 0400 1250000 | 1.2                       | "               | 20.5 | 12.0 | "    |     |   | "    | " |      |   | "   |
| MPE 0400 1350000 | 1.3                       | "               | 21.0 | 12.5 | "    |     |   | "    | " |      |   | "   |
| MPE 0400 1550000 | 1.5                       | "               | 22.0 | 13.5 | "    |     |   | "    | " |      |   | "   |
| MPE 0400 1650000 | 1.6                       | "               | 22.5 | 14.0 | "    |     |   | "    | " |      |   | "   |
| MPE 0400 1850000 | 1.8                       | 31.0            | 23.0 | 13.0 | 27.5 |     |   | 22.5 | " |      |   | "   |
| MPE 0400 2050000 | 2.0                       | "               | 23.5 | 13.5 | "    |     |   | "    | " |      |   | "   |
| MPE 0400 2250000 | 2.2                       | "               | 24.5 | 14.5 | "    |     |   | "    | " |      |   | "   |
| MPE 0400 2450000 | 2.4                       | 37.0            | 23.5 | 13.5 | 32.5 |     |   | 27.5 | " |      |   | "   |
| MPE 0400 2750000 | 2.7                       | "               | 24.0 | 14.0 | "    |     |   | "    | " |      |   | "   |
| MPE 0400 3050000 | 3.0                       | "               | 25.0 | 15.0 | "    |     |   | "    | " |      |   | "   |
| MPE 0400 3350000 | 3.3                       | "               | "    | 16.5 | "    |     |   | "    | " |      |   | "   |

| SPECIFICATION           | METALLIZED POLYPROPYLENE FILM CAPACITOR | SPEC              |      |     |      |     |   |      |   |      |     |     |
|-------------------------|---|-------------------|------|-----|------|-----|---|------|---|------|-----|-----|
|                         |   | P S C 3 1 7 0 0 0 |      |     |      |     |   |      |   |      |     |     |
| MPE, MPEF, MPEC-450V.DC |   |                   |      |     |      |     |   |      |   |      |     |     |
| Parts No.               | Capacitance<br>( $\mu$ F)               | Dimensions (mm)   |      |     |      |     |   |      |   |      |     |     |
|                         |   | W                 | H    | T   | P    | F   |   | F    |   | F    | d   |     |
| MPE 0450 1030000        | 0.010                                   | 13.0              | 9.0  | 5.5 | 10.0 | 7.5 | A | 10.0 | A |      | 0.6 |     |
| MPE 0450 1130000        | 0.011                                   | "                 | "    | "   | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 1230000        | 0.012                                   | "                 | "    | "   | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 1330000        | 0.013                                   | "                 | 9.5  | "   | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 1530000        | 0.015                                   | "                 | "    | 6.0 | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 1630000        | 0.016                                   | "                 | "    | "   | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 1830000        | 0.018                                   | "                 | 10.0 | "   | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 2030000        | 0.020                                   | "                 | "    | 6.5 | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 2230000        | 0.022                                   | "                 | 10.5 | "   | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 2430000        | 0.024                                   | "                 | "    | 7.0 | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 2730000        | 0.027                                   | "                 | "    | "   | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 3030000        | 0.030                                   | "                 | 11.0 | 7.5 | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 3330000        | 0.033                                   | "                 | 9.0  | 5.5 | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 3630000        | 0.036                                   | "                 | 9.5  | "   | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 3930000        | 0.039                                   | "                 | "    | 6.0 | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 4330000        | 0.043                                   | "                 | "    | "   | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 4730000        | 0.047                                   | "                 | 10.0 | "   | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 5130000        | 0.051                                   | "                 | "    | 6.5 | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 5630000        | 0.056                                   | "                 | "    | "   | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 6230000        | 0.062                                   | "                 | 10.5 | "   | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 6830000        | 0.068                                   | "                 | "    | 7.0 | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 7530000        | 0.075                                   | "                 | 11.0 | "   | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 8230000        | 0.082                                   | "                 | "    | 7.5 | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 9130000        | 0.091                                   | "                 | 11.5 | "   | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 1040000        | 0.10                                    | 15.5              | 12.0 | 6.5 | 12.5 | "   | B | "    | " | "    | "   |     |
| MPE 0450 1140000        | 0.11                                    | "                 | "    | 7.0 | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 1240000        | 0.12                                    | "                 | 12.5 | "   | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 1340000        | 0.13                                    | "                 | "    | 7.5 | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 1540000        | 0.15                                    | "                 | 13.0 | "   | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 1640000        | 0.16                                    | "                 | "    | 8.0 | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 1840000        | 0.18                                    | 18.5              | 13.5 | 7.0 | 15.0 | "   | " | "    | B | 12.5 | A   | 0.8 |
| MPE 0450 2040000        | 0.20                                    | "                 | 14.0 | "   | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 2240000        | 0.22                                    | "                 | "    | 7.5 | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 2440000        | 0.24                                    | "                 | 14.5 | "   | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 2740000        | 0.27                                    | "                 | 15.0 | 8.0 | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 3040000        | 0.30                                    | "                 | "    | 8.5 | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 3340000        | 0.33                                    | "                 | 15.5 | 9.0 | "    | "   | " | "    | " | "    | "   |     |
| MPE 0450 3640000        | 0.36                                    | "                 | 16.0 | "   | "    | "   | " | "    | " | "    | "   |     |

|               |   |                           |
|---------------|---|---------------------------|
| SPECIFICATION | METALLIZED POLYPROPYLENE FILM CAPACITOR | SPEC<br>P S C 3 1 7 0 0 0 |
|---------------|---|---------------------------|

MPE, MPEF, MPEC-450V.DC

| Parts No.        | Capacitance<br>( $\mu$ F) | Dimensions (mm) |      |      |      |     |   |      |   |      |   |     |
|------------------|---------------------------|-----------------|------|------|------|-----|---|------|---|------|---|-----|
|                  |                           | W               | H    | T    | P    | F   | F | F    | F | F    | d |     |
| MPE 0450 3940000 | 0.39                      | 18.5            | 15.5 | 10.0 | 15.0 | 7.5 | B | 10.0 | B | 12.5 | A | 0.8 |
| MPE 0450 4340000 | 0.43                      | "               | 16.0 | 10.5 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0450 4740000 | 0.47                      | 20.5            | 16.5 | 9.5  | 17.5 | "   | " | "    | " | "    | B | "   |
| MPE 0450 5140000 | 0.51                      | "               | "    | 10.0 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0450 5640000 | 0.56                      | "               | 17.0 | 10.5 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0450 6240000 | 0.62                      | "               | 17.5 | 11.0 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0450 6840000 | 0.68                      | "               | "    | 12.0 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0450 7540000 | 0.75                      | "               | 18.0 | 12.5 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0450 8240000 | 0.82                      | 25.5            | 18.5 | 10.0 | 22.5 |     |   | 17.5 | " |      |   | "   |
| MPE 0450 9140000 | 0.91                      | "               | 19.0 | 10.5 | "    |     |   | "    | " |      |   | "   |
| MPE 0450 1050000 | 1.0                       | "               | 19.5 | 11.0 | "    |     |   | "    | " |      |   | "   |
| MPE 0450 1150000 | 1.1                       | "               | 20.0 | 11.5 | "    |     |   | "    | " |      |   | "   |
| MPE 0450 1250000 | 1.2                       | "               | 20.5 | 12.0 | "    |     |   | "    | " |      |   | "   |
| MPE 0450 1350000 | 1.3                       | "               | 21.0 | 12.5 | "    |     |   | "    | " |      |   | "   |
| MPE 0450 1550000 | 1.5                       | "               | 22.0 | 13.5 | "    |     |   | "    | " |      |   | "   |
| MPE 0450 1650000 | 1.6                       | "               | 22.5 | 14.0 | "    |     |   | "    | " |      |   | "   |
| MPE 0450 1850000 | 1.8                       | 31.0            | 23.0 | 13.0 | 27.5 |     |   | 22.5 | " |      |   | "   |
| MPE 0450 2050000 | 2.0                       | "               | 23.5 | 13.5 | "    |     |   | "    | " |      |   | "   |
| MPE 0450 2250000 | 2.2                       | "               | 24.5 | 14.5 | "    |     |   | "    | " |      |   | "   |
| MPE 0450 2450000 | 2.4                       | 37.0            | 23.5 | 13.5 | 32.5 |     |   | 27.5 | " |      |   | "   |
| MPE 0450 2750000 | 2.7                       | "               | 24.0 | 14.0 | "    |     |   | "    | " |      |   | "   |
| MPE 0450 3050000 | 3.0                       | "               | 25.0 | 15.0 | "    |     |   | "    | " |      |   | "   |
| MPE 0450 3350000 | 3.3                       | "               | "    | 16.5 | "    |     |   | "    | " |      |   | "   |

|               |   |                   |
|---------------|---|-------------------|
| SPECIFICATION | METALLIZED POLYPROPYLENE FILM CAPACITOR | SPEC              |
|               |   | P S C 3 1 7 0 0 0 |

MPE, MPEF, MPEC-630V.DC

| Parts No.        | Capacitance<br>( $\mu$ F) | Dimensions (mm) |      |      |      |     |   |      |   |      |   |     |
|------------------|---------------------------|-----------------|------|------|------|-----|---|------|---|------|---|-----|
|                  |                           | W               | H    | T    | P    | F   |   | F    |   | F    | d |     |
| MPE 0630 1030000 | 0.010                     | 13.0            | 9.0  | 5.5  | 10.0 | 7.5 | A | 10.0 | A |      |   | 0.6 |
| MPE 0630 1130000 | 0.011                     | "               | "    | "    | "    | "   | " | "    | " |      |   | "   |
| MPE 0630 1230000 | 0.012                     | "               | "    | "    | "    | "   | " | "    | " |      |   | "   |
| MPE 0630 1330000 | 0.013                     | "               | 9.5  | "    | "    | "   | " | "    | " |      |   | "   |
| MPE 0630 1530000 | 0.015                     | "               | "    | 6.0  | "    | "   | " | "    | " |      |   | "   |
| MPE 0630 1630000 | 0.016                     | "               | "    | "    | "    | "   | " | "    | " |      |   | "   |
| MPE 0630 1830000 | 0.018                     | "               | 10.0 | "    | "    | "   | " | "    | " |      |   | "   |
| MPE 0630 2030000 | 0.020                     | "               | "    | 6.5  | "    | "   | " | "    | " |      |   | "   |
| MPE 0630 2230000 | 0.022                     | "               | 10.5 | "    | "    | "   | " | "    | " |      |   | "   |
| MPE 0630 2430000 | 0.024                     | "               | "    | 7.0  | "    | "   | " | "    | " |      |   | "   |
| MPE 0630 2730000 | 0.027                     | "               | "    | "    | "    | "   | " | "    | " |      |   | "   |
| MPE 0630 3030000 | 0.030                     | "               | 11.0 | 7.5  | "    | "   | " | "    | " |      |   | "   |
| MPE 0630 3330000 | 0.033                     | 15.5            | 11.5 | 6.5  | 12.5 | "   | B | "    | " |      |   | "   |
| MPE 0630 3630000 | 0.036                     | "               | "    | "    | "    | "   | " | "    | " |      |   | "   |
| MPE 0630 3930000 | 0.039                     | "               | 12.0 | "    | "    | "   | " | "    | " |      |   | "   |
| MPE 0630 4330000 | 0.043                     | "               | "    | 7.0  | "    | "   | " | "    | " |      |   | "   |
| MPE 0630 4730000 | 0.047                     | "               | 12.5 | "    | "    | "   | " | "    | " |      |   | "   |
| MPE 0630 5130000 | 0.051                     | "               | "    | 7.5  | "    | "   | " | "    | " |      |   | "   |
| MPE 0630 5630000 | 0.056                     | "               | 13.0 | "    | "    | "   | " | "    | " |      |   | "   |
| MPE 0630 6230000 | 0.062                     | "               | "    | 8.0  | "    | "   | " | "    | " |      |   | "   |
| MPE 0630 6830000 | 0.068                     | "               | 12.5 | 9.0  | "    | "   | " | "    | " |      |   | "   |
| MPE 0630 7530000 | 0.075                     | "               | 13.0 | "    | "    | "   | " | "    | " |      |   | "   |
| MPE 0630 8230000 | 0.082                     | 18.5            | 14.0 | 7.0  | 15.0 | "   | " | "    | B | 12.5 | A | 0.8 |
| MPE 0630 9130000 | 0.091                     | "               | 14.5 | 7.5  | "    | "   | " | "    | " | "    | " | "   |
| MPE 0630 1040000 | 0.10                      | "               | "    | 8.0  | "    | "   | " | "    | " | "    | " | "   |
| MPE 0630 1140000 | 0.11                      | "               | 15.0 | "    | "    | "   | " | "    | " | "    | " | "   |
| MPE 0630 1240000 | 0.12                      | "               | "    | 8.5  | "    | "   | " | "    | " | "    | " | "   |
| MPE 0630 1340000 | 0.13                      | "               | 15.5 | "    | "    | "   | " | "    | " | "    | " | "   |
| MPE 0630 1540000 | 0.15                      | "               | 16.0 | 9.5  | "    | "   | " | "    | " | "    | " | "   |
| MPE 0630 1640000 | 0.16                      | 20.5            | 15.5 | 9.0  | 17.5 | "   | " | "    | " | "    | B | "   |
| MPE 0630 1840000 | 0.18                      | "               | 16.0 | 9.5  | "    | "   | " | "    | " | "    | " | "   |
| MPE 0630 2040000 | 0.20                      | "               | 16.5 | "    | "    | "   | " | "    | " | "    | " | "   |
| MPE 0630 2240000 | 0.22                      | "               | 17.0 | 10.0 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0630 2440000 | 0.24                      | "               | 17.5 | 10.5 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0630 2740000 | 0.27                      | "               | 18.0 | 11.0 | "    | "   | " | "    | " | "    | " | "   |
| MPE 0630 3040000 | 0.30                      | 25.5            | "    | 9.5  | 22.5 |     |   | 17.5 | " |      |   | "   |
| MPE 0630 3340000 | 0.33                      | "               | 18.5 | 10.0 | "    |     |   | "    | " |      |   | "   |
| MPE 0630 3640000 | 0.36                      | "               | 18.5 | 10.5 | "    |     |   | "    | " |      |   | "   |

|               |   |                           |
|---------------|---|---------------------------|
| SPECIFICATION | METALLIZED POLYPROPYLENE FILM CAPACITOR | SPEC<br>P S C 3 1 7 0 0 0 |
|---------------|---|---------------------------|

MPE, MPEF, MPEC-630V.DC

| Parts No.        | Capacitance<br>( $\mu$ F) | Dimensions (mm) |      |      |      |   |   |      |   |   |     |
|------------------|---------------------------|-----------------|------|------|------|---|---|------|---|---|-----|
|                  |                           | W               | H    | T    | P    | F | F | F    | F | F | d   |
| MPE 0630 3940000 | 0.39                      | 25.5            | 19.0 | 10.5 | 22.5 |   |   | 17.5 | B |   | 0.8 |
| MPE 0630 4340000 | 0.43                      | "               | 19.5 | 11.0 | "    |   |   | "    | " |   | "   |
| MPE 0630 4740000 | 0.47                      | "               | 20.0 | 11.5 | "    |   |   | "    | " |   | "   |
| MPE 0630 5140000 | 0.51                      | "               | 20.5 | 12.0 | "    |   |   | "    | " |   | "   |
| MPE 0630 5640000 | 0.56                      | "               | 21.0 | 13.0 | "    |   |   | "    | " |   | "   |
| MPE 0630 6240000 | 0.62                      | "               | 22.0 | 13.5 | "    |   |   | "    | " |   | "   |
| MPE 0630 6840000 | 0.68                      | "               | 22.5 | 14.0 | "    |   |   | "    | " |   | "   |
| MPE 0630 7540000 | 0.75                      | "               | 23.0 | 15.0 | "    |   |   | "    | " |   | "   |
| MPE 0630 8240000 | 0.82                      | 31.0            | 23.5 | 13.5 | 27.5 |   |   | 22.5 | " |   | "   |
| MPE 0630 9140000 | 0.91                      | "               | 24.0 | 14.0 | "    |   |   | "    | " |   | "   |
| MPE 0630 1050000 | 1.0                       | "               | 25.0 | 15.0 | "    |   |   | "    | " |   | "   |
| MPE 0630 1150000 | 1.1                       | "               | 25.5 | 15.5 | "    |   |   | "    | " |   | "   |
| MPE 0630 1250000 | 1.2                       | "               | 26.0 | 16.5 | "    |   |   | "    | " |   | "   |
| MPE 0630 1350000 | 1.3                       | 37.0            | 24.0 | 16.0 | 32.5 |   |   | 27.5 | " |   | "   |
| MPE 0630 1550000 | 1.5                       | "               | 25.5 | 17.0 | "    |   |   | "    | " |   | "   |
| MPE 0630 1650000 | 1.6                       | "               | 26.0 | 17.5 | "    |   |   | "    | " |   | "   |
| MPE 0630 1850000 | 1.8                       | "               | "    | 19.5 | "    |   |   | "    | " |   | "   |
| MPE 0630 2050000 | 2.0                       | "               | 27.0 | 20.5 | "    |   |   | "    | " |   | "   |
| MPE 0630 2250000 | 2.2                       | "               | 28.0 | 21.0 | "    |   |   | "    | " |   | "   |

SPECIFICATION

METALLIZED POLYPROPYLENE FILM CAPACITOR

SPEC

P S C 3 1 7 0 0 0

MPE, MPEF, MPEC-800V.DC

| Parts No.        | Capacitance<br>( $\mu$ F) | Dimensions (mm) |      |     |      |     |   |      |   |     |  |
|------------------|---------------------------|-----------------|------|-----|------|-----|---|------|---|-----|--|
|                  |                           | W               | H    | T   | P    | F   |   | F    |   | d   |  |
| MPE 0800 1020000 | 0.0010                    | 18.5            | 9.0  | 5.5 | 15.0 | 7.5 | B | 15.0 | A | 0.6 |  |
| MPE 0800 1120000 | 0.0011                    | "               | 9.5  | 6.0 | "    | "   | " | "    | " | "   |  |
| MPE 0800 1220000 | 0.0012                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 1320000 | 0.0013                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 1520000 | 0.0015                    | "               | 10.0 | 6.5 | "    | "   | " | "    | " | "   |  |
| MPE 0800 1620000 | 0.0016                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 1820000 | 0.0018                    | "               | 10.5 | 7.0 | "    | "   | " | "    | " | "   |  |
| MPE 0800 2020000 | 0.0020                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 2220000 | 0.0022                    | "               | 11.0 | 7.5 | "    | "   | " | "    | " | "   |  |
| MPE 0800 2420000 | 0.0024                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 2720000 | 0.0027                    | "               | 9.0  | 5.5 | "    | "   | " | "    | " | "   |  |
| MPE 0800 3020000 | 0.0030                    | "               | 9.5  | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 3320000 | 0.0033                    | "               | "    | 6.0 | "    | "   | " | "    | " | "   |  |
| MPE 0800 3620000 | 0.0036                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 3920000 | 0.0039                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 4320000 | 0.0043                    | "               | 11.0 | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 4720000 | 0.0047                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 5120000 | 0.0051                    | "               | 11.5 | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 5620000 | 0.0056                    | "               | 9.5  | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 6220000 | 0.0062                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 6820000 | 0.0068                    | "               | 10.0 | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 7520000 | 0.0075                    | "               | 11.0 | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 8220000 | 0.0082                    | "               | 9.0  | 5.5 | "    | "   | " | "    | " | "   |  |
| MPE 0800 9120000 | 0.0091                    | "               | 9.5  | 6.0 | "    | "   | " | "    | " | "   |  |
| MPE 0800 1030000 | 0.010                     | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 1130000 | 0.011                     | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 1230000 | 0.012                     | "               | 11.0 | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 1330000 | 0.013                     | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 1530000 | 0.015                     | "               | 9.5  | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 1630000 | 0.016                     | "               | 10.0 | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 1830000 | 0.018                     | "               | 11.0 | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 2030000 | 0.020                     | "               | "    | "   | "    | "   | " | "    | " | 0.8 |  |
| MPE 0800 2230000 | 0.022                     | "               | 11.5 | "   | "    | "   | " | "    | " | "   |  |
| MPE 0800 2430000 | 0.024                     | "               | 12.5 | 6.5 | "    | "   | " | "    | " | "   |  |
| MPE 0800 2730000 | 0.027                     | "               | "    | 7.0 | "    | "   | " | "    | " | "   |  |
| MPE 0800 3030000 | 0.030                     | "               | 12.5 | "   | "    | "   | " | "    | " | "   |  |

SPECIFICATION

METALLIZED POLYPROPYLENE FILM CAPACITOR

SPEC

P S C 3 1 7 0 0 0

MPE, MPEF, MPEC-800V.DC

| Parts No.        | Capacitance<br>( $\mu$ F) | Dimensions (mm) |      |      |      |      |   |      |   |     |
|------------------|---------------------------|-----------------|------|------|------|------|---|------|---|-----|
|                  |                           | W               | H    | T    | P    | F    |   | F    |   | d   |
| MPE 0800 3330000 | 0.033                     | 23.5            | 11.5 | 6.5  | 20.0 | 15.0 | B | 20.0 | A | 0.8 |
| MPE 0800 3630000 | 0.036                     | "               | 12.0 | "    | "    | "    | " | "    | " | "   |
| MPE 0800 3930000 | 0.039                     | "               | "    | 7.0  | "    | "    | " | "    | " | "   |
| MPE 0800 4330000 | 0.043                     | "               | 12.5 | "    | "    | "    | " | "    | " | "   |
| MPE 0800 4730000 | 0.047                     | "               | "    | 7.5  | "    | "    | " | "    | " | "   |
| MPE 0800 5130000 | 0.051                     | "               | 13.0 | "    | "    | "    | " | "    | " | "   |
| MPE 0800 5630000 | 0.056                     | "               | 14.0 | "    | "    | "    | " | "    | " | "   |
| MPE 0800 6230000 | 0.062                     | "               | 14.5 | "    | "    | "    | " | "    | " | "   |
| MPE 0800 6830000 | 0.068                     | "               | 17.0 | 7.0  | "    | "    | " | "    | " | "   |
| MPE 0800 7530000 | 0.075                     | "               | 17.5 | 7.5  | "    | "    | " | "    | " | "   |
| MPE 0800 8230000 | 0.082                     | "               | "    | "    | "    | "    | " | "    | " | "   |
| MPE 0800 9130000 | 0.091                     | "               | 18.0 | 8.0  | "    | "    | " | "    | " | "   |
| MPE 0800 1040000 | 0.10                      | "               | 18.5 | 8.5  | "    | "    | " | "    | " | "   |
| MPE 0800 1140000 | 0.11                      | 28.5            | 17.5 | 7.5  | 25.0 | "    | " | 25.0 | " | "   |
| MPE 0800 1240000 | 0.12                      | "               | "    | "    | "    | "    | " | "    | " | "   |
| MPE 0800 1340000 | 0.13                      | "               | 18.0 | 8.0  | "    | "    | " | "    | " | "   |
| MPE 0800 1540000 | 0.15                      | "               | 18.5 | 8.5  | "    | "    | " | "    | " | "   |
| MPE 0800 1640000 | 0.16                      | "               | 20.0 | "    | "    | "    | " | "    | " | "   |
| MPE 0800 1840000 | 0.18                      | "               | 20.5 | 9.0  | "    | "    | " | "    | " | "   |
| MPE 0800 2040000 | 0.20                      | "               | 21.0 | 9.5  | "    | "    | " | "    | " | "   |
| MPE 0800 2240000 | 0.22                      | "               | 21.5 | 10.0 | "    | "    | " | "    | " | "   |
| MPE 0800 2440000 | 0.24                      | "               | "    | "    | "    | "    | " | "    | " | "   |
| MPE 0800 2740000 | 0.27                      | "               | 22.5 | 11.0 | "    | "    | " | "    | " | "   |
| MPE 0800 3040000 | 0.30                      | 28.5            | 23.0 | 11.5 | "    | "    | " | "    | " | "   |
| MPE 0800 3340000 | 0.33                      | "               | 23.5 | 12.0 | "    | "    | " | "    | " | "   |
| MPE 0800 3640000 | 0.36                      | "               | 24.0 | 12.5 | "    | "    | " | "    | " | "   |
| MPE 0800 3940000 | 0.39                      | "               | 23.5 | 13.5 | "    | "    | " | "    | " | "   |
| MPE 0800 4340000 | 0.43                      | "               | 24.0 | 14.0 | "    | "    | " | "    | " | "   |
| MPE 0800 4740000 | 0.47                      | "               | 25.0 | 15.0 | "    | "    | " | "    | " | "   |
| MPE 0800 5140000 | 0.51                      | "               | 25.5 | 16.0 | "    | "    | " | "    | " | "   |
| MPE 0800 5640000 | 0.56                      | "               | "    | 17.5 | "    | "    | " | "    | " | "   |
| MPE 0800 6240000 | 0.62                      | "               | 26.5 | 18.0 | "    | "    | " | "    | " | "   |
| MPE 0800 6840000 | 0.68                      | "               | 27.5 | 19.0 | "    | "    | " | "    | " | "   |

SPECIFICATION

METALLIZED POLYPROPYLENE FILM CAPACITOR

SPEC

P S C 3 1 7 0 0 0

MPE, MPEF, MPEC-1000V.DC

| Parts No.        | Capacitance<br>( $\mu$ F) | Dimensions (mm) |      |     |      |     |   |      |   |     |  |
|------------------|---------------------------|-----------------|------|-----|------|-----|---|------|---|-----|--|
|                  |                           | W               | H    | T   | P    | F   |   | F    |   | d   |  |
| MPE 1000 1020000 | 0.0010                    | 18.5            | 9.0  | 5.5 | 15.0 | 7.5 | B | 15.0 | A | 0.6 |  |
| MPE 1000 1120000 | 0.0011                    | "               | 9.5  | 6.0 | "    | "   | " | "    | " | "   |  |
| MPE 1000 1220000 | 0.0012                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 1320000 | 0.0013                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 1520000 | 0.0015                    | "               | 10.0 | 6.5 | "    | "   | " | "    | " | "   |  |
| MPE 1000 1620000 | 0.0016                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 1820000 | 0.0018                    | "               | 10.5 | 7.0 | "    | "   | " | "    | " | "   |  |
| MPE 1000 2020000 | 0.0020                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 2220000 | 0.0022                    | "               | 11.0 | 7.5 | "    | "   | " | "    | " | "   |  |
| MPE 1000 2420000 | 0.0024                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 2720000 | 0.0027                    | "               | 9.0  | 5.5 | "    | "   | " | "    | " | "   |  |
| MPE 1000 3020000 | 0.0030                    | "               | 9.5  | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 3320000 | 0.0033                    | "               | "    | 6.0 | "    | "   | " | "    | " | "   |  |
| MPE 1000 3620000 | 0.0036                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 3920000 | 0.0039                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 4320000 | 0.0043                    | "               | 11.0 | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 4720000 | 0.0047                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 5120000 | 0.0051                    | "               | 11.5 | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 5620000 | 0.0056                    | "               | 9.5  | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 6220000 | 0.0062                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 6820000 | 0.0068                    | "               | 10.0 | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 7520000 | 0.0075                    | "               | 11.0 | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 8220000 | 0.0082                    | "               | 9.0  | 5.5 | "    | "   | " | "    | " | "   |  |
| MPE 1000 9120000 | 0.0091                    | "               | 9.5  | 6.0 | "    | "   | " | "    | " | "   |  |
| MPE 1000 1030000 | 0.010                     | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 1130000 | 0.011                     | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 1230000 | 0.012                     | "               | 11.0 | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 1330000 | 0.013                     | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 1530000 | 0.015                     | "               | 11.5 | "   | "    | "   | " | "    | " | 0.8 |  |
| MPE 1000 1630000 | 0.016                     | "               | "    | 6.5 | "    | "   | " | "    | " | "   |  |
| MPE 1000 1830000 | 0.018                     | "               | 12.0 | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 2030000 | 0.020                     | "               | "    | 7.0 | "    | "   | " | "    | " | "   |  |
| MPE 1000 2230000 | 0.022                     | "               | 12.5 | "   | "    | "   | " | "    | " | "   |  |
| MPE 1000 2430000 | 0.024                     | "               | "    | 7.5 | "    | "   | " | "    | " | "   |  |
| MPE 1000 2730000 | 0.027                     | "               | 13.0 | 8.0 | "    | "   | " | "    | " | "   |  |
| MPE 1000 3030000 | 0.030                     | "               | 13.5 | "   | "    | "   | " | "    | " | "   |  |



SPECIFICATION

METALLIZED POLYPROPYLENE FILM CAPACITOR

SPEC

P S C 3 1 7 0 0 0

MPE, MPEF, MPEC-1000V.DC

| Parts No.        | Capacitance<br>( $\mu$ F) | Dimensions (mm) |      |      |      |      |   |      |   |     |
|------------------|---------------------------|-----------------|------|------|------|------|---|------|---|-----|
|                  |                           | W               | H    | T    | P    | F    | F | A    | d |     |
| MPE 1000 3330000 | 0.033                     | 23.5            | 12.5 | 7.0  | 20.0 | 15.0 | B | 20.0 | A | 0.8 |
| MPE 1000 3630000 | 0.036                     | "               | "    | 7.5  | "    | "    | " | "    | " | "   |
| MPE 1000 3930000 | 0.039                     | "               | 13.0 | "    | "    | "    | " | "    | " | "   |
| MPE 1000 4330000 | 0.043                     | "               | 14.5 | "    | "    | "    | " | "    | " | "   |
| MPE 1000 4730000 | 0.047                     | "               | "    | "    | "    | "    | " | "    | " | "   |
| MPE 1000 5130000 | 0.051                     | "               | 16.0 | "    | "    | "    | " | "    | " | "   |
| MPE 1000 5630000 | 0.056                     | "               | "    | 8.0  | "    | "    | " | "    | " | "   |
| MPE 1000 6230000 | 0.062                     | "               | 16.5 | "    | "    | "    | " | "    | " | "   |
| MPE 1000 6830000 | 0.068                     | "               | 18.0 | "    | "    | "    | " | "    | " | "   |
| MPE 1000 7530000 | 0.075                     | "               | 18.5 | 8.5  | "    | "    | " | "    | " | "   |
| MPE 1000 8230000 | 0.082                     | "               | "    | 9.0  | "    | "    | " | "    | " | "   |
| MPE 1000 9130000 | 0.091                     | "               | 19.0 | "    | "    | "    | " | "    | " | "   |
| MPE 1000 1040000 | 0.10                      | "               | 19.5 | 9.5  | "    | "    | " | "    | " | "   |
| MPE 1000 1140000 | 0.11                      | 28.5            | 18.5 | 8.5  | 25.0 | "    | " | 25.0 | " | "   |
| MPE 1000 1240000 | 0.12                      | "               | 19.0 | 9.0  | "    | "    | " | "    | " | "   |
| MPE 1000 1340000 | 0.13                      | "               | "    | 9.5  | "    | "    | " | "    | " | "   |
| MPE 1000 1540000 | 0.15                      | "               | 20.0 | 10.0 | "    | "    | " | "    | " | "   |
| MPE 1000 1640000 | 0.16                      | "               | 21.0 | 9.5  | "    | "    | " | "    | " | "   |
| MPE 1000 1840000 | 0.18                      | "               | 22.0 | 10.5 | "    | "    | " | "    | " | "   |
| MPE 1000 2040000 | 0.20                      | "               | 22.5 | 11.0 | "    | "    | " | "    | " | "   |
| MPE 1000 2240000 | 0.22                      | "               | 23.0 | 11.5 | "    | "    | " | "    | " | "   |

SPECIFICATION

METALLIZED POLYPROPYLENE FILM CAPACITOR

SPEC

P S C 3 1 7 0 0 0

MPE, MPEF, MPEC-1250V.DC

| Parts No.        | Capacitance<br>( $\mu$ F) | Dimensions (mm) |      |     |      |     |   |      |   |     |  |
|------------------|---------------------------|-----------------|------|-----|------|-----|---|------|---|-----|--|
|                  |                           | W               | H    | T   | P    | F   |   | F    |   | d   |  |
| MPE 1250 1020000 | 0.0010                    | 18.5            | 9.0  | 5.5 | 15.0 | 7.5 | B | 15.0 | A | 0.6 |  |
| MPE 1250 1120000 | 0.0011                    | "               | 9.5  | 6.0 | "    | "   | " | "    | " | "   |  |
| MPE 1250 1220000 | 0.0012                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1250 1320000 | 0.0013                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1250 1520000 | 0.0015                    | "               | 10.0 | 6.5 | "    | "   | " | "    | " | "   |  |
| MPE 1250 1620000 | 0.0016                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1250 1820000 | 0.0018                    | "               | 10.5 | 7.0 | "    | "   | " | "    | " | "   |  |
| MPE 1250 2020000 | 0.0020                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1250 2220000 | 0.0022                    | "               | 11.0 | 7.5 | "    | "   | " | "    | " | "   |  |
| MPE 1250 2420000 | 0.0024                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1250 2720000 | 0.0027                    | "               | 9.0  | 5.5 | "    | "   | " | "    | " | "   |  |
| MPE 1250 3020000 | 0.0030                    | "               | 9.5  | "   | "    | "   | " | "    | " | "   |  |
| MPE 1250 3320000 | 0.0033                    | "               | "    | 6.0 | "    | "   | " | "    | " | "   |  |
| MPE 1250 3620000 | 0.0036                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1250 3920000 | 0.0039                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1250 4320000 | 0.0043                    | "               | 11.0 | "   | "    | "   | " | "    | " | "   |  |
| MPE 1250 4720000 | 0.0047                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1250 5120000 | 0.0051                    | "               | 11.5 | "   | "    | "   | " | "    | " | "   |  |
| MPE 1250 5620000 | 0.0056                    | "               | 9.5  | "   | "    | "   | " | "    | " | "   |  |
| MPE 1250 6220000 | 0.0062                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1250 6820000 | 0.0068                    | "               | 10.0 | "   | "    | "   | " | "    | " | "   |  |
| MPE 1250 7520000 | 0.0075                    | "               | 11.0 | "   | "    | "   | " | "    | " | "   |  |
| MPE 1250 8220000 | 0.0082                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1250 9120000 | 0.0091                    | "               | 11.5 | 6.5 | "    | "   | " | "    | " | 0.8 |  |
| MPE 1250 1030000 | 0.010                     | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1250 1130000 | 0.011                     | "               | 12.0 | "   | "    | "   | " | "    | " | "   |  |
| MPE 1250 1230000 | 0.012                     | "               | "    | 7.0 | "    | "   | " | "    | " | "   |  |
| MPE 1250 1330000 | 0.013                     | "               | 12.5 | "   | "    | "   | " | "    | " | "   |  |
| MPE 1250 1530000 | 0.015                     | "               | 13.0 | "   | "    | "   | " | "    | " | "   |  |
| MPE 1250 1630000 | 0.016                     | "               | "    | 8.0 | "    | "   | " | "    | " | "   |  |

SPECIFICATION

METALLIZED POLYPROPYLENE FILM CAPACITOR

SPEC

P S C 3 1 7 0 0 0

MPE, MPEF, MPEC-1250V.DC

| Parts No.        | Capacitance<br>( $\mu$ F) | Dimensions (mm) |      |      |      |      |   |      |   |     |  |
|------------------|---------------------------|-----------------|------|------|------|------|---|------|---|-----|--|
|                  |                           | W               | H    | T    | P    | F    |   | F    |   | d   |  |
| MPE 1250 1830000 | 0.018                     | 23.5            | 12.0 | 7.0  | 20.0 | 15.0 | B | 20.0 | A | 0.8 |  |
| MPE 1250 2030000 | 0.020                     | "               | 12.5 | 7.5  | "    | "    | " | "    | " | "   |  |
| MPE 1250 2230000 | 0.022                     | "               | 13.0 | "    | "    | "    | " | "    | " | "   |  |
| MPE 1250 2430000 | 0.024                     | "               | "    | 8.0  | "    | "    | " | "    | " | "   |  |
| MPE 1250 2730000 | 0.027                     | "               | 15.5 | 7.0  | "    | "    | " | "    | " | "   |  |
| MPE 1250 3030000 | 0.030                     | "               | 16.0 | 7.5  | "    | "    | " | "    | " | "   |  |
| MPE 1250 3330000 | 0.033                     | "               | "    | 8.0  | "    | "    | " | "    | " | "   |  |
| MPE 1250 3630000 | 0.036                     | "               | 16.5 | "    | "    | "    | " | "    | " | "   |  |
| MPE 1250 3930000 | 0.039                     | "               | "    | 8.5  | "    | "    | " | "    | " | "   |  |
| MPE 1250 4330000 | 0.043                     | "               | 19.5 | 8.0  | "    | "    | " | "    | " | "   |  |
| MPE 1250 4730000 | 0.047                     | "               | "    | "    | "    | "    | " | "    | " | "   |  |
| MPE 1250 5130000 | 0.051                     | "               | 20.0 | 8.5  | "    | "    | " | "    | " | "   |  |
| MPE 1250 5630000 | 0.056                     | 28.5            | 19.0 | 7.5  | 25.0 | "    | " | 25.0 | " | "   |  |
| MPE 1250 6230000 | 0.062                     | "               | 19.5 | 8.0  | "    | "    | " | "    | " | "   |  |
| MPE 1250 6830000 | 0.068                     | "               | 21.0 | "    | "    | "    | " | "    | " | "   |  |
| MPE 1250 7530000 | 0.075                     | "               | 21.5 | "    | "    | "    | " | "    | " | "   |  |
| MPE 1250 8230000 | 0.082                     | "               | "    | 8.5  | "    | "    | " | "    | " | "   |  |
| MPE 1250 9130000 | 0.091                     | "               | 22.0 | 9.0  | "    | "    | " | "    | " | "   |  |
| MPE 1250 1040000 | 0.10                      | "               | 22.5 | 9.5  | "    | "    | " | "    | " | "   |  |
| MPE 1250 1140000 | 0.11                      | "               | 23.0 | 10.0 | "    | "    | " | "    | " | "   |  |
| MPE 1250 1240000 | 0.12                      | "               | 23.5 | 10.5 | "    | "    | " | "    | " | "   |  |
| MPE 1250 1340000 | 0.13                      | "               | 24.0 | 11.0 | "    | "    | " | "    | " | "   |  |
| MPE 1250 1540000 | 0.15                      | "               | 24.5 | 11.5 | "    | "    | " | "    | " | "   |  |
| MPE 1250 1640000 | 0.16                      | "               | 25.0 | 12.0 | "    | "    | " | "    | " | "   |  |
| MPE 1250 1840000 | 0.18                      | "               | 26.0 | 13.0 | "    | "    | " | "    | " | "   |  |

SPECIFICATION

METALLIZED POLYPROPYLENE FILM CAPACITOR

SPEC

P S C 3 1 7 0 0 0

MPE, MPEF, MPEC-1600V.DC

| Parts No.        | Capacitance<br>( $\mu$ F) | Dimensions (mm) |      |     |      |     |   |      |   |     |  |
|------------------|---------------------------|-----------------|------|-----|------|-----|---|------|---|-----|--|
|                  |                           | W               | H    | T   | P    | F   |   | F    |   | d   |  |
| MPE 1600 1020000 | 0.0010                    | 18.5            | 9.0  | 5.5 | 15.0 | 7.5 | B | 15.0 | A | 0.6 |  |
| MPE 1600 1120000 | 0.0011                    | "               | 9.5  | 6.0 | "    | "   | " | "    | " | "   |  |
| MPE 1600 1220000 | 0.0012                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1600 1320000 | 0.0013                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1600 1520000 | 0.0015                    | "               | 10.0 | 6.5 | "    | "   | " | "    | " | "   |  |
| MPE 1600 1620000 | 0.0016                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1600 1820000 | 0.0018                    | "               | 10.5 | 7.0 | "    | "   | " | "    | " | "   |  |
| MPE 1600 2020000 | 0.0020                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1600 2220000 | 0.0022                    | "               | 11.0 | 7.5 | "    | "   | " | "    | " | "   |  |
| MPE 1600 2420000 | 0.0024                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1600 2720000 | 0.0027                    | "               | 9.0  | 5.5 | "    | "   | " | "    | " | "   |  |
| MPE 1600 3020000 | 0.0030                    | "               | 9.5  | "   | "    | "   | " | "    | " | "   |  |
| MPE 1600 3320000 | 0.0033                    | "               | "    | 6.0 | "    | "   | " | "    | " | "   |  |
| MPE 1600 3620000 | 0.0036                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1600 3920000 | 0.0039                    | "               | 11.0 | "   | "    | "   | " | "    | " | "   |  |
| MPE 1600 4320000 | 0.0043                    | "               | "    | "   | "    | "   | " | "    | " | "   |  |
| MPE 1600 4720000 | 0.0047                    | "               | "    | "   | "    | "   | " | "    | " | 0.8 |  |
| MPE 1600 5120000 | 0.0051                    | "               | 11.5 | "   | "    | "   | " | "    | " | "   |  |
| MPE 1600 5620000 | 0.0056                    | "               | "    | 6.5 | "    | "   | " | "    | " | "   |  |
| MPE 1600 6220000 | 0.0062                    | "               | 12.0 | "   | "    | "   | " | "    | " | "   |  |
| MPE 1600 6820000 | 0.0068                    | "               | "    | 7.0 | "    | "   | " | "    | " | "   |  |
| MPE 1600 7520000 | 0.0075                    | "               | 12.5 | "   | "    | "   | " | "    | " | "   |  |
| MPE 1600 8220000 | 0.0082                    | "               | "    | 7.5 | "    | "   | " | "    | " | "   |  |
| MPE 1600 9120000 | 0.0091                    | "               | 13.0 | "   | "    | "   | " | "    | " | "   |  |

SPECIFICATION

METALLIZED POLYPROPYLENE FILM CAPACITOR

SPEC

P S C 3 1 7 0 0 0

MPE, MPEF, MPEC-1600V.DC

| Parts No.        | Capacitance<br>( $\mu$ F) | Dimensions (mm) |      |      |      |      |   |      |   |     |  |
|------------------|---------------------------|-----------------|------|------|------|------|---|------|---|-----|--|
|                  |                           | W               | H    | T    | P    | F    |   | F    |   | d   |  |
| MPE 1600 1030000 | 0.010                     | 23.5            | 12.5 | 7.5  | 20.0 | 15.0 | B | 20.0 | A | 0.8 |  |
| MPE 1600 1130000 | 0.011                     | "               | 13.0 | "    | "    | "    | " | "    | " | "   |  |
| MPE 1600 1230000 | 0.012                     | "               | "    | 8.0  | "    | "    | " | "    | " | "   |  |
| MPE 1600 1330000 | 0.013                     | "               | 13.5 | "    | "    | "    | " | "    | " | "   |  |
| MPE 1600 1530000 | 0.015                     | "               | 15.0 | "    | "    | "    | " | "    | " | "   |  |
| MPE 1600 1630000 | 0.016                     | "               | "    | 8.5  | "    | "    | " | "    | " | "   |  |
| MPE 1600 1830000 | 0.018                     | "               | 16.5 | 8.0  | "    | "    | " | "    | " | "   |  |
| MPE 1600 2030000 | 0.020                     | "               | 17.0 | 8.5  | "    | "    | " | "    | " | "   |  |
| MPE 1600 2230000 | 0.022                     | 28.5            | 15.0 | 8.0  | 25.0 | "    | " | 25.0 | " | "   |  |
| MPE 1600 2430000 | 0.024                     | "               | 15.5 | 8.5  | "    | "    | " | "    | " | "   |  |
| MPE 1600 2730000 | 0.027                     | "               | 17.0 | "    | "    | "    | " | "    | " | "   |  |
| MPE 1600 3030000 | 0.030                     | "               | 18.5 | "    | "    | "    | " | "    | " | "   |  |
| MPE 1600 3330000 | 0.033                     | "               | 20.0 | "    | "    | "    | " | "    | " | "   |  |
| MPE 1600 3630000 | 0.036                     | "               | "    | "    | "    | "    | " | "    | " | "   |  |
| MPE 1600 3930000 | 0.039                     | "               | 21.5 | "    | "    | "    | " | "    | " | "   |  |
| MPE 1600 4330000 | 0.043                     | "               | 22.0 | 9.0  | "    | "    | " | "    | " | "   |  |
| MPE 1600 4730000 | 0.047                     | "               | 22.5 | 9.5  | "    | "    | " | "    | " | "   |  |
| MPE 1600 5130000 | 0.051                     | "               | 23.0 | 10.0 | "    | "    | " | "    | " | "   |  |
| MPE 1600 5630000 | 0.056                     | "               | 23.5 | "    | "    | "    | " | "    | " | "   |  |
| MPE 1600 6230000 | 0.062                     | "               | 24.0 | 11.0 | "    | "    | " | "    | " | "   |  |
| MPE 1600 6830000 | 0.068                     | "               | 24.5 | 11.5 | "    | "    | " | "    | " | "   |  |
| MPE 1600 7530000 | 0.075                     | "               | 25.0 | 12.0 | "    | "    | " | "    | " | "   |  |
| MPE 1600 8230000 | 0.082                     | "               | 25.5 | 12.5 | "    | "    | " | "    | " | "   |  |
| MPE 1600 9130000 | 0.091                     | "               | 26.5 | 13.0 | "    | "    | " | "    | " | "   |  |
| MPE 1600 1040000 | 0.10                      | "               | 27.0 | 14.0 | "    | "    | " | "    | " | "   |  |

SPECIFICATION

METALLIZED POLYPROPYLENE FILM CAPACITOR

SPEC

P S C 3 1 7 0 0 0

## SPECIFICATION OF TAPING FOR AUTOMATIC INSERTION (Type MPEV)

## 1. SCOPE

This specification applies to the taping dimensions and performance required for film capacitors used in the automatic radial insertion system.

Style of packing : Ammo pack

## 2. TAPING DIMENSIONS

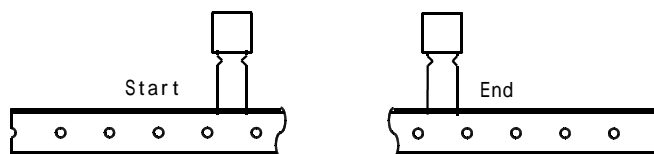
| Type    | Taping style  | STYLE-2 | STYLE-3 | STYLE-5 | STYLE-6 |
|---------|---------------|---------|---------|---------|---------|
|         | Rated voltage |         |         |         |         |
| M P E V | 250V. DC      | 103~913 | 103~334 | 103~913 | 104~105 |
|         | 315V. DC      | 103~913 | 103~224 | 103~913 | 104~564 |
|         | 400V. DC      | 103~913 | 103~274 | 103~913 | 104~364 |
|         | 450V. DC      | 103~913 | 103~274 | 103~913 | 104~364 |
|         | 630V. DC      | 103~303 | 103~563 | 103~303 | 333~204 |
|         | 800V. DC      | —       | 102~303 | —       | 102~104 |
|         | 1000V. DC     | —       | 102~303 | —       | 102~104 |
|         | 1250V. DC     | —       | 102~163 | —       | 102~513 |
|         | 1600V. DC     | —       | 102~912 | —       | 102~203 |

## 3. TAPING PERFORMANCE (to be satisfied with the following point)

3-1. Appearance : To be no damages or cracks on components and the tape.

3-2. Missing components : A maximum of 3 consecutive components may be missing.

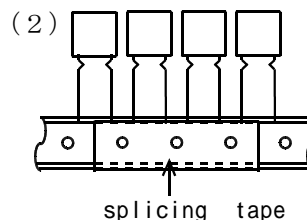
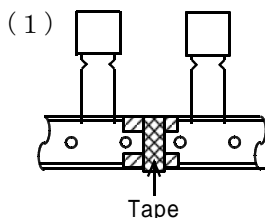
3-3. Tip of the tape : To leave the blank tape more than 4.5 feed hole pitch from the start, and the end of the tape.



3-4. Tape splicing : Tape splicing may be done with (1) or (2).

(1) The carrier tape (include hold-down tape) shall be cut at the center of hole and hole, and spliced with tape.

(2) The carrier tape (include hold down tape) shall be cut at the center of hole, and spliced with splicing tape.



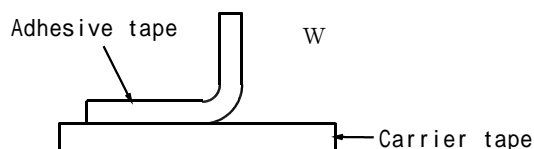
SPECIFICATION

METALLIZED POLYPROPYLENE FILM CAPACITOR

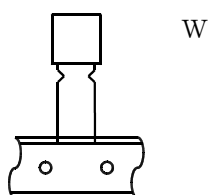
SPEC

P S C 3 1 7 0 0 0

3-5. Adhesive strength : When pulling an adhesive tape in W direction (upward) using a push-and-pull scale, adhesive strength shall be 3N or more



3-6. Tensile test : When pulling a test sample by the force 10N, there shall be no gaps or breakdowns.



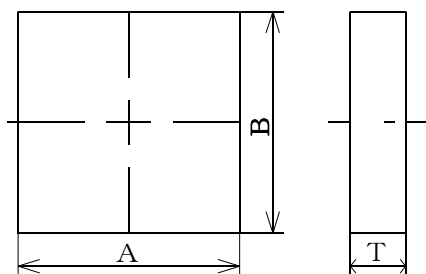
3-7. Moisture resistance : A taped test sample shall be left in a chamber with a temperature of 40°C and RH95% for 96 hours. Then after being left for one hour at room temperature the test sample shall be submitted to a tensile test of item 3.6.

3-8. Temperature cycling test : A test sample shall be submitted to 5 cycles of temperature cycling test.

One cycle consists of : 2 hours at -40°C  
2 hours at +85°C

Then after being left for one hour at room temperature, the test sample shall be submitted to a tensile test of item 3.6.

#### 4. BOX DIMENSIONS



(Unit : mm)

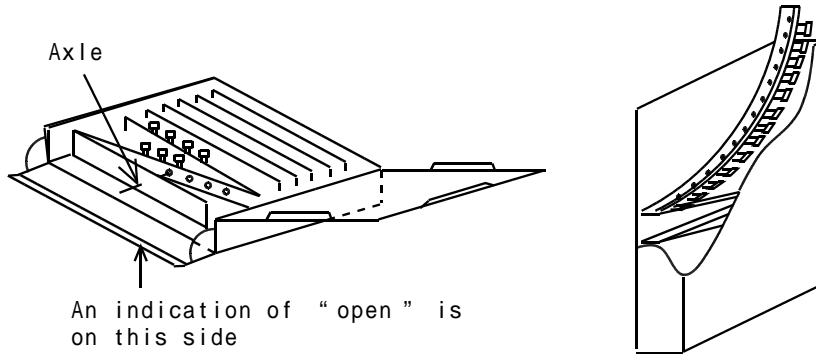
| Type | A       | B       | T      |
|------|---------|---------|--------|
| c    | 330 ± 7 | 330 ± 7 | 45 ± 5 |
| d    | 330 ± 7 | 330 ± 7 | 50 ± 5 |
| e    | 330 ± 7 | 330 ± 7 | 55 ± 5 |

|               |   |                           |
|---------------|---|---------------------------|
| SPECIFICATION | METALLIZED POLYPROPYLENE FILM CAPACITOR | SPEC<br>P S C 3 1 7 0 0 0 |
|---------------|---|---------------------------|

5. STYLE OF PACKING (Ammo pack)

5-1.Packaging

- \* Fold the tape in the cardboard box, with hold-down tepe turning up against an outlet opening.
- \* Thread the feed hole with a axle and fix the tape.



5-2.Marking

The following particulars shall be labelled on the surface of a box.

Example)

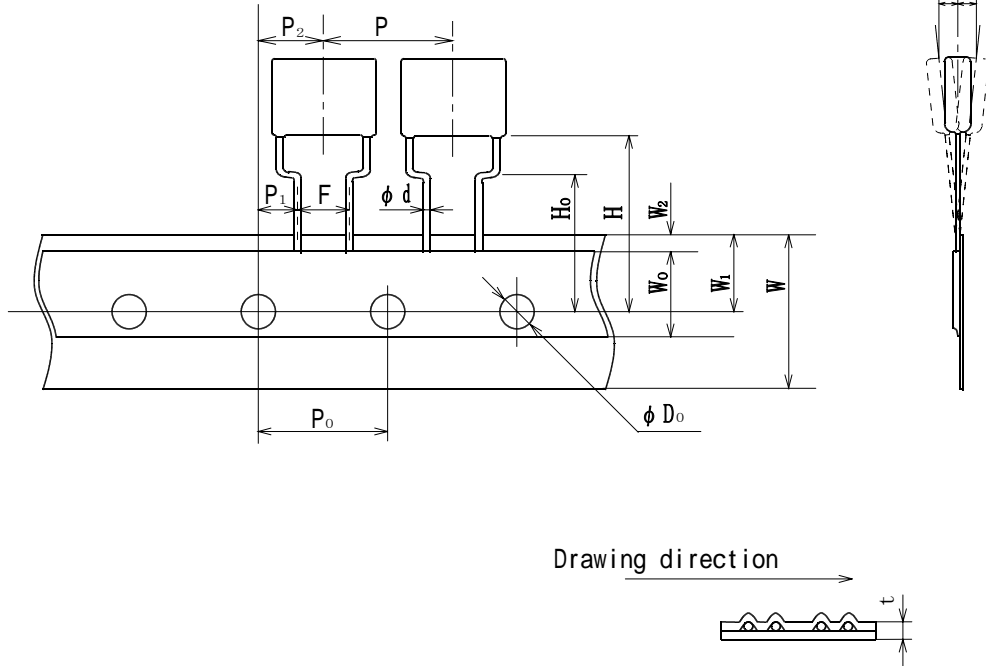
|               |  |    |        |           |  |          |  |
|---------------|--|----|--------|-----------|--|----------|--|
| CODE CUSTOMER |  |    |        | INSP DATE |  | PKG NO   |  |
| PARTS NO      |  |    |        | MACH NO   |  | QTY/PKG  |  |
| ORDER NO      |  |    | LOT NO |           |  | ROHS     |  |
| TYPE          |  | WV |        | TOL       |  | CAP      |  |
|               |  |    |        | EDP CODE  |  | QT (PCS) |  |

|               |          |                    |          |
|---------------|----------|--------------------|----------|
| CODE CUSTOMER | MACH NO  | PRODUCTION COUNTRY | TOL(%)   |
| INSP DATE     | ORDER NO | TYPE               | CAP      |
| PARTS NO      | LOT NO   | W V                | EDP CODE |
|               |          |                    | QT(PCS)  |



|               |   |                   |
|---------------|---|-------------------|
|               |   | SPEC              |
| SPECIFICATION | METALLIZED POLYPROPYLENE FILM CAPACITOR | P S C 3 1 7 0 0 0 |

|           |           |          |
|-----------|-----------|----------|
| Type MPEV | 103 ~ 913 | 250V. DC |
| STYLE-2   | 103 ~ 913 | 315V. DC |
| (D200)    | 103 ~ 913 | 400V. DC |
|           | 103 ~ 913 | 450V. DC |
|           | 103 ~ 303 | 630V. DC |



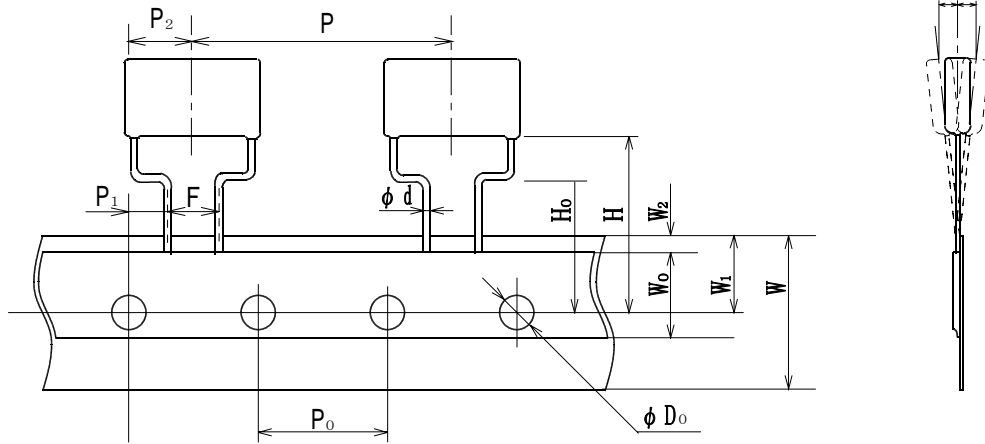
(Unit : mm)

| P    | P <sub>0</sub> | (1)<br>P <sub>1</sub> | P <sub>2</sub> | d             | (1)<br>F | (2)<br>h | W    | W <sub>0</sub> | W <sub>1</sub> | (3)<br>W <sub>2</sub> | H           | (1)<br>H <sub>0</sub> | D <sub>0</sub> | t    |
|------|----------------|-----------------------|----------------|---------------|----------|----------|------|----------------|----------------|-----------------------|-------------|-----------------------|----------------|------|
| 15.0 | 15.0           | 5.0                   | 7.5            | 0.6<br>or 0.8 | 5.0      | 0        | 18.0 | 5.0            | 9.0            | 3.0<br>Max            | 22.0<br>Max | 16.0                  | 4.0            | 0.7  |
| ±1.0 | ±0.3           | ±0.7                  | ±1.3           | ±0.05         | ±0.08    | ±2.0     | ±1.0 | —              | ±0.5           | —                     | —           | ±0.5                  | ±0.2           | ±0.2 |

- (1) To be measured under the clinch-position.
- (2) To be measured the top of component.
- (3) Hold-down tape is not to exceed over the carrier tape.

|               |   |  |                   |  |  |  |
|---------------|---|--|-------------------|--|--|--|
| SPECIFICATION | METALLIZED POLYPROPYLENE FILM CAPACITOR |  | SPEC              |  |  |  |
|               |   |  | P S C 3 1 7 0 0 0 |  |  |  |

|           |           |          |           |          |           |           |
|-----------|-----------|----------|-----------|----------|-----------|-----------|
| Type MPEV | 103 ~ 334 | 250V. DC | 103 ~ 274 | 450V. DC | 102 ~ 303 | 1000V. DC |
| STYLE - 3 | 103 ~ 224 | 315V. DC | 103 ~ 563 | 630V. DC | 102 ~ 163 | 1250V. DC |
| (D 2 1 0) | 103 ~ 274 | 400V. DC | 102 ~ 303 | 800V. DC | 102 ~ 912 | 1600V. DC |



Drawing direction →



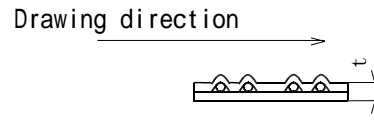
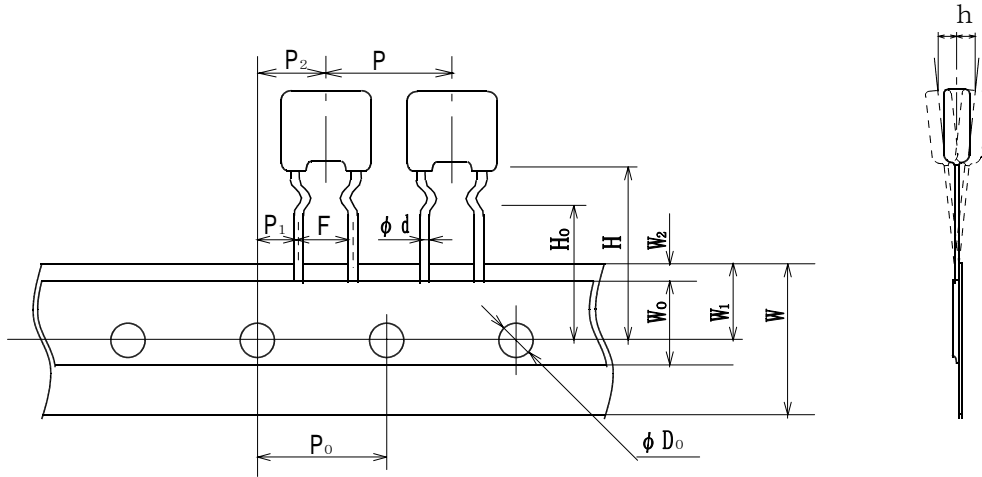
(Unit : mm)

| P    | P <sub>0</sub> | (1) P <sub>1</sub> | P <sub>2</sub> | d             | (1) F        | (2) h | W            | W <sub>0</sub> | W <sub>1</sub> | (3) W <sub>2</sub> | H           | (1) H <sub>0</sub> | D <sub>0</sub> | t    |
|------|----------------|--------------------|----------------|---------------|--------------|-------|--------------|----------------|----------------|--------------------|-------------|--------------------|----------------|------|
| 25.4 | 12.7           | 3.85               | 6.35           | 0.6<br>or 0.8 | 5.0          | 0     | 18.0         | 5.0            | 9.0            | 3.0<br>Max         | 22.0<br>Max | 16.0               | 4.0            | 0.7  |
| ±1.0 | ±0.3           | ±0.7               | ±1.3           | ±0.05         | ±0.8<br>±0.2 | ±2.0  | ±1.0<br>±0.5 | —              | ±0.5           | —                  | —           | ±0.5               | ±0.2           | ±0.2 |

- (1) To be measured under the clinch-position.
- (2) To be measured the top of component.
- (3) Hold-down tape is not to exceed over the carrier tape.

|               |   |                   |
|---------------|---|-------------------|
|               |   | SPEC              |
| SPECIFICATION | METALLIZED POLYPROPYLENE FILM CAPACITOR | P S C 3 1 7 0 0 0 |

|           |           |          |
|-----------|-----------|----------|
| Type MPEV | 103 ~ 913 | 250V. DC |
| STYLE-5   | 103 ~ 913 | 315V. DC |
| (0200)    | 103 ~ 913 | 400V. DC |
|           | 103 ~ 913 | 450V. DC |
|           | 103 ~ 303 | 630V. DC |



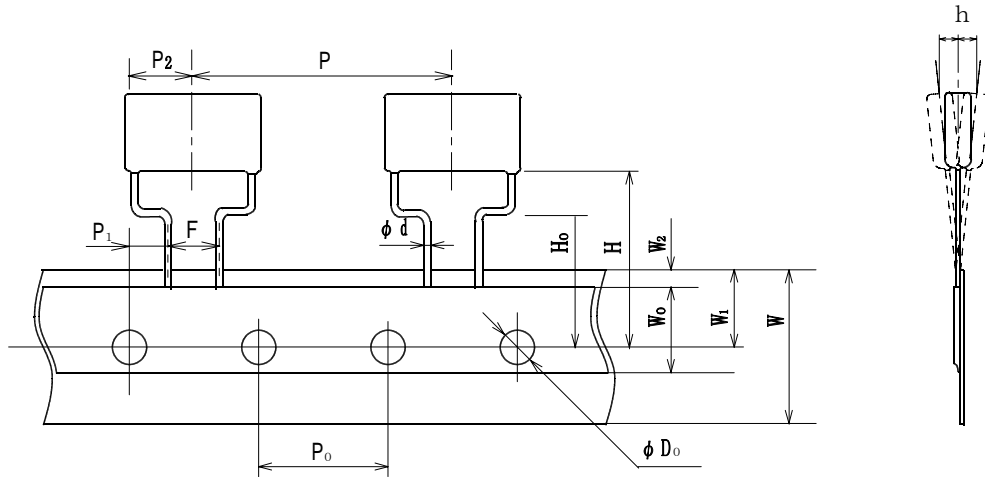
(Unit : mm)

| P    | P <sub>0</sub> | (1) P <sub>1</sub> | P <sub>2</sub> | d             | (1) F        | (2) h | W            | W <sub>0</sub> | W <sub>1</sub> | (3) W <sub>2</sub> | H           | (1) H <sub>0</sub> | D <sub>0</sub> | t    |
|------|----------------|--------------------|----------------|---------------|--------------|-------|--------------|----------------|----------------|--------------------|-------------|--------------------|----------------|------|
| 15.0 | 15.0           | 3.75               | 7.5            | 0.6<br>or 0.8 | 7.5          | 0     | 18.0         | 5.0            | 9.0            | 3.0<br>Max         | 22.0<br>Max | 16.0               | 4.0            | 0.7  |
| ±1.0 | ±0.3           | ±0.7               | ±1.3           | ±0.05         | ±0.8<br>±0.2 | ±2.0  | ±1.0<br>±0.5 | —              | ±0.5           | —                  | —           | ±0.5               | ±0.2           | ±0.2 |

- (1) To be measured under the clinch-position.
- (2) To be measured the top of component.
- (3) Hold-down tape is not to exceed over the carrier tape.

|               |   |  |                   |  |  |  |
|---------------|---|--|-------------------|--|--|--|
| SPECIFICATION | METALLIZED POLYPROPYLENE FILM CAPACITOR |  | SPEC              |  |  |  |
|               |   |  | P S C 3 1 7 0 0 0 |  |  |  |

|           |           |          |           |          |           |           |
|-----------|-----------|----------|-----------|----------|-----------|-----------|
| Type MPEV | 104 ~ 105 | 250V. DC | 104 ~ 364 | 450V. DC | 102 ~ 104 | 1000V. DC |
| STYLE - 6 | 104 ~ 564 | 315V. DC | 333 ~ 204 | 630V. DC | 102 ~ 513 | 1250V. DC |
| (0200)    | 104 ~ 364 | 400V. DC | 102 ~ 104 | 800V. DC | 102 ~ 203 | 1600V. DC |



Drawing direction →



(Unit : mm)

| P    | P <sub>0</sub> | (1) P <sub>1</sub> | P <sub>2</sub> | d             | (1) F        | (2) h | W            | W <sub>0</sub> | W <sub>1</sub> | (3) W <sub>2</sub> | H           | (1) H <sub>0</sub> | D <sub>0</sub> | t    |
|------|----------------|--------------------|----------------|---------------|--------------|-------|--------------|----------------|----------------|--------------------|-------------|--------------------|----------------|------|
| 30.0 | 15.0           | 3.75               | 7.5            | 0.6<br>or 0.8 | 7.5          | 0     | 18.0         | 5.0            | 9.0            | 3.0<br>Max         | 22.0<br>Max | 16.0               | 4.0            | 0.7  |
| ±1.0 | ±0.3           | ±0.7               | ±1.3           | ±0.05         | ±0.8<br>±0.2 | ±2.0  | ±1.0<br>±0.5 | —              | ±0.5           | —                  | —           | ±0.5               | ±0.2           | ±0.2 |

- (1) To be measured under the clinch-position.
- (2) To be measured the top of component.
- (3) Hold-down tape is not to exceed over the carrier tape.

SPECIFICATION

METALLIZED POLYPROPYLENE FILM CAPACITOR

SPEC

P S C 3 1 7 0 0 0

## Packing quantity

MPEV-250V. DC

(Unit : pcs)

| Capacitance<br>( $\mu$ F) | Standard quantity |         |         |         | Capacitance<br>( $\mu$ F) | Standard<br>quantity |
|---------------------------|-------------------|---------|---------|---------|---------------------------|----------------------|
|                           | STYLE-2           | STYLE-3 | STYLE-5 | STYLE-6 |                           | STYLE-6              |
| 0.010                     | 1,000             | 500     | 1,000   |         | 0.47                      | 400                  |
| 0.011                     | "                 | "       | "       |         | 0.51                      | "                    |
| 0.012                     | "                 | "       | "       |         | 0.56                      | "                    |
| 0.013                     | "                 | "       | "       |         | 0.62                      | "                    |
| 0.015                     | "                 | "       | "       |         | 0.68                      | 300                  |
| 0.016                     | "                 | "       | "       |         | 0.75                      | "                    |
| 0.018                     | "                 | "       | "       |         | 0.82                      | "                    |
| 0.020                     | "                 | "       | "       |         | 0.91                      | "                    |
| 0.022                     | "                 | "       | "       |         | 1.0                       | "                    |
| 0.024                     | "                 | "       | "       |         |                           |                      |
| 0.027                     | "                 | "       | "       |         |                           |                      |
| 0.030                     | 500               | 400     | 500     |         |                           |                      |
| 0.033                     | 1,000             | 500     | 1,000   |         |                           |                      |
| 0.036                     | "                 | "       | "       |         |                           |                      |
| 0.039                     | "                 | "       | "       |         |                           |                      |
| 0.043                     | "                 | "       | "       |         |                           |                      |
| 0.047                     | "                 | "       | "       |         |                           |                      |
| 0.051                     | "                 | "       | "       |         |                           |                      |
| 0.056                     | "                 | "       | "       |         |                           |                      |
| 0.062                     | "                 | "       | "       |         |                           |                      |
| 0.068                     | "                 | "       | "       |         |                           |                      |
| 0.075                     | "                 | "       | "       |         |                           |                      |
| 0.082                     | 500               | 400     | 500     |         |                           |                      |
| 0.091                     | "                 | "       | "       |         |                           |                      |
| 0.10                      |                   | 500     |         | 400     |                           |                      |
| 0.11                      |                   | "       |         | "       |                           |                      |
| 0.12                      |                   | "       |         | "       |                           |                      |
| 0.13                      |                   | 400     |         | "       |                           |                      |
| 0.15                      |                   | "       |         | "       |                           |                      |
| 0.16                      |                   | "       |         | 300     |                           |                      |
| 0.18                      |                   | 500     |         | 500     |                           |                      |
| 0.20                      |                   | "       |         | 400     |                           |                      |
| 0.22                      |                   | "       |         | "       |                           |                      |
| 0.24                      |                   | "       |         | "       |                           |                      |
| 0.27                      |                   | "       |         | "       |                           |                      |
| 0.30                      |                   | 400     |         | "       |                           |                      |
| 0.33                      |                   | "       |         | "       |                           |                      |
| 0.36                      |                   |         |         | 300     |                           |                      |
| 0.39                      |                   |         |         | "       |                           |                      |
| 0.43                      |                   |         |         | "       |                           |                      |

SPECIFICATION

METALLIZED POLYPROPYLENE FILM CAPACITOR

SPEC

P S C 3 1 7 0 0 0

## Packing quantity

MPEV-315V. DC

(Unit : pcs)

| Capacitance<br>( $\mu$ F) | Standard quantity |         |         |         | Capacitance<br>( $\mu$ F) | Standard<br>quantity |
|---------------------------|-------------------|---------|---------|---------|---------------------------|----------------------|
|                           | STYLE-2           | STYLE-3 | STYLE-5 | STYLE-6 |                           | STYLE-6              |
| 0.010                     | 1,000             | 500     | 1,000   |         | 0.47                      | 300                  |
| 0.011                     | "                 | "       | "       |         | 0.51                      | "                    |
| 0.012                     | "                 | "       | "       |         | 0.56                      | "                    |
| 0.013                     | "                 | "       | "       |         |                           |                      |
| 0.015                     | "                 | "       | "       |         |                           |                      |
| 0.016                     | "                 | "       | "       |         |                           |                      |
| 0.018                     | "                 | "       | "       |         |                           |                      |
| 0.020                     | "                 | "       | "       |         |                           |                      |
| 0.022                     | "                 | "       | "       |         |                           |                      |
| 0.024                     | "                 | "       | "       |         |                           |                      |
| 0.027                     | "                 | "       | "       |         |                           |                      |
| 0.030                     | 500               | 400     | 500     |         |                           |                      |
| 0.033                     | 1,000             | 500     | 1,000   |         |                           |                      |
| 0.036                     | "                 | "       | "       |         |                           |                      |
| 0.039                     | "                 | "       | "       |         |                           |                      |
| 0.043                     | "                 | "       | "       |         |                           |                      |
| 0.047                     | "                 | "       | "       |         |                           |                      |
| 0.051                     | "                 | "       | "       |         |                           |                      |
| 0.056                     | "                 | "       | "       |         |                           |                      |
| 0.062                     | "                 | "       | "       |         |                           |                      |
| 0.068                     | "                 | "       | "       |         |                           |                      |
| 0.075                     | "                 | "       | "       |         |                           |                      |
| 0.082                     | 500               | 400     | 500     |         |                           |                      |
| 0.091                     | "                 | "       | "       |         |                           |                      |
| 0.10                      |                   | 500     |         | 400     |                           |                      |
| 0.11                      |                   | "       |         | "       |                           |                      |
| 0.12                      |                   | "       |         | "       |                           |                      |
| 0.13                      |                   | 400     |         | "       |                           |                      |
| 0.15                      |                   | "       |         | "       |                           |                      |
| 0.16                      |                   | "       |         | 300     |                           |                      |
| 0.18                      |                   | 500     |         | 400     |                           |                      |
| 0.20                      |                   | 400     |         | "       |                           |                      |
| 0.22                      |                   | "       |         | 300     |                           |                      |
| 0.24                      |                   |         |         | "       |                           |                      |
| 0.27                      |                   |         |         | "       |                           |                      |
| 0.30                      |                   |         |         | "       |                           |                      |
| 0.33                      |                   |         |         | "       |                           |                      |
| 0.36                      |                   |         |         | "       |                           |                      |
| 0.39                      |                   |         |         | "       |                           |                      |
| 0.43                      |                   |         |         | "       |                           |                      |

SPECIFICATION

METALLIZED POLYPROPYLENE FILM CAPACITOR

SPEC

P S C 3 1 7 0 0 0

## Packing quantity

MPEV-400V. DC

(Unit : pcs)

| Capacitance<br>( $\mu$ F) | Standard quantity |         |         |         |
|---------------------------|-------------------|---------|---------|---------|
|                           | STYLE-2           | STYLE-3 | STYLE-5 | STYLE-6 |
| 0.010                     | 1,000             | 500     | 1,000   |         |
| 0.011                     | "                 | "       | "       |         |
| 0.012                     | "                 | "       | "       |         |
| 0.013                     | "                 | "       | "       |         |
| 0.015                     | "                 | "       | "       |         |
| 0.016                     | "                 | "       | "       |         |
| 0.018                     | "                 | "       | "       |         |
| 0.020                     | "                 | "       | "       |         |
| 0.022                     | "                 | "       | "       |         |
| 0.024                     | "                 | "       | "       |         |
| 0.027                     | "                 | "       | "       |         |
| 0.030                     | 500               | 400     | 500     |         |
| 0.033                     | 1,000             | 500     | 1,000   |         |
| 0.036                     | "                 | "       | "       |         |
| 0.039                     | "                 | "       | "       |         |
| 0.043                     | "                 | "       | "       |         |
| 0.047                     | "                 | "       | "       |         |
| 0.051                     | "                 | "       | "       |         |
| 0.056                     | "                 | "       | "       |         |
| 0.062                     | "                 | "       | "       |         |
| 0.068                     | "                 | "       | "       |         |
| 0.075                     | "                 | "       | "       |         |
| 0.082                     | 500               | 400     | 500     |         |
| 0.091                     | "                 | "       | "       |         |
| 0.10                      |                   | 500     |         | 400     |
| 0.11                      |                   | "       |         | "       |
| 0.12                      |                   | "       |         | "       |
| 0.13                      |                   | 400     |         | "       |
| 0.15                      |                   | "       |         | "       |
| 0.16                      |                   | "       |         | 300     |
| 0.18                      |                   | 500     |         | 400     |
| 0.20                      |                   | "       |         | "       |
| 0.22                      |                   | 400     |         | "       |
| 0.24                      |                   | "       |         | "       |
| 0.27                      |                   | "       |         | 300     |
| 0.30                      |                   |         |         | "       |
| 0.33                      |                   |         |         | "       |
| 0.36                      |                   |         |         | "       |

SPECIFICATION

METALLIZED POLYPROPYLENE FILM CAPACITOR

SPEC

P S C 3 1 7 0 0 0

## Packing quantity

MPEV-450V. DC

(Unit : pcs)

| Capacitance<br>( $\mu$ F) | Standard quantity |         |         |         |
|---------------------------|-------------------|---------|---------|---------|
|                           | STYLE-2           | STYLE-3 | STYLE-5 | STYLE-6 |
| 0.010                     | 1,000             | 500     | 1,000   |         |
| 0.011                     | "                 | "       | "       |         |
| 0.012                     | "                 | "       | "       |         |
| 0.013                     | "                 | "       | "       |         |
| 0.015                     | "                 | "       | "       |         |
| 0.016                     | "                 | "       | "       |         |
| 0.018                     | "                 | "       | "       |         |
| 0.020                     | "                 | "       | "       |         |
| 0.022                     | "                 | "       | "       |         |
| 0.024                     | "                 | "       | "       |         |
| 0.027                     | "                 | "       | "       |         |
| 0.030                     | 500               | 400     | 500     |         |
| 0.033                     | 1,000             | 500     | 1,000   |         |
| 0.036                     | "                 | "       | "       |         |
| 0.039                     | "                 | "       | "       |         |
| 0.043                     | "                 | "       | "       |         |
| 0.047                     | "                 | "       | "       |         |
| 0.051                     | "                 | "       | "       |         |
| 0.056                     | "                 | "       | "       |         |
| 0.062                     | "                 | "       | "       |         |
| 0.068                     | "                 | "       | "       |         |
| 0.075                     | "                 | "       | "       |         |
| 0.082                     | 500               | 400     | 500     |         |
| 0.091                     | "                 | "       | "       |         |
| 0.10                      |                   | 500     |         | 400     |
| 0.11                      |                   | "       |         | "       |
| 0.12                      |                   | "       |         | "       |
| 0.13                      |                   | 400     |         | "       |
| 0.15                      |                   | "       |         | "       |
| 0.16                      |                   | "       |         | 300     |
| 0.18                      |                   | 500     |         | 400     |
| 0.20                      |                   | "       |         | "       |
| 0.22                      |                   | 400     |         | "       |
| 0.24                      |                   | "       |         | "       |
| 0.27                      |                   | "       |         | 300     |
| 0.30                      |                   |         |         | "       |
| 0.33                      |                   |         |         | "       |
| 0.36                      |                   |         |         | "       |



SPECIFICATION

METALLIZED POLYPROPYLENE FILM CAPACITOR

SPEC

P S C 3 1 7 0 0 0

## Packing quantity

MPEV-630V. DC

(Unit : pcs)

| Capacitance<br>( $\mu$ F) | Standard quantity |         |         |         |
|---------------------------|-------------------|---------|---------|---------|
|                           | STYLE-2           | STYLE-3 | STYLE-5 | STYLE-6 |
| 0.010                     | 1,000             | 500     | 1,000   |         |
| 0.011                     | "                 | "       | "       |         |
| 0.012                     | "                 | "       | "       |         |
| 0.013                     | "                 | "       | "       |         |
| 0.015                     | "                 | "       | "       |         |
| 0.016                     | "                 | "       | "       |         |
| 0.018                     | "                 | "       | "       |         |
| 0.020                     | "                 | "       | "       |         |
| 0.022                     | "                 | "       | "       |         |
| 0.024                     | "                 | "       | "       |         |
| 0.027                     | "                 | "       | "       |         |
| 0.030                     | 500               | 400     | 500     |         |
| 0.033                     |                   | 500     |         | 400     |
| 0.036                     |                   | "       |         | "       |
| 0.039                     |                   | "       |         | "       |
| 0.043                     |                   | "       |         | "       |
| 0.047                     |                   | "       |         | "       |
| 0.051                     |                   | 400     |         | "       |
| 0.056                     |                   | "       |         | "       |
| 0.062                     |                   |         |         | 300     |
| 0.068                     |                   |         |         | "       |
| 0.075                     |                   |         |         | "       |
| 0.082                     |                   |         |         | 400     |
| 0.091                     |                   |         |         | "       |
| 0.10                      |                   |         |         | 300     |
| 0.11                      |                   |         |         | "       |
| 0.12                      |                   |         |         | "       |
| 0.13                      |                   |         |         | "       |
| 0.15                      |                   |         |         | "       |
| 0.16                      |                   |         |         | "       |
| 0.18                      |                   |         |         | "       |
| 0.20                      |                   |         |         | "       |

SPECIFICATION

METALLIZED POLYPROPYLENE FILM CAPACITOR

SPEC

P S C 3 1 7 0 0 0

**Packing quantity**

MPEV-800V.DC (Unit : pcs)

| Capacitance<br>( $\mu$ F) | Standard quantity |         |
|---------------------------|-------------------|---------|
|                           | STYLE-3           | STYLE-6 |
| 0.0010                    | 500               | 500     |
| 0.0011                    | 〃                 | 〃       |
| 0.0012                    | 〃                 | 〃       |
| 0.0013                    | 〃                 | 〃       |
| 0.0015                    | 〃                 | 400     |
| 0.0016                    | 〃                 | 〃       |
| 0.0018                    | 〃                 | 〃       |
| 0.0020                    | 〃                 | 〃       |
| 0.0022                    | 400               | 〃       |
| 0.0024                    | 〃                 | 〃       |
| 0.0027                    | 500               | 500     |
| 0.0030                    | 〃                 | 〃       |
| 0.0033                    | 〃                 | 〃       |
| 0.0036                    | 〃                 | 〃       |
| 0.0039                    | 〃                 | 〃       |
| 0.0043                    | 〃                 | 〃       |
| 0.0047                    | 〃                 | 〃       |
| 0.0051                    | 〃                 | 〃       |
| 0.0056                    | 〃                 | 〃       |
| 0.0062                    | 〃                 | 〃       |
| 0.0068                    | 〃                 | 〃       |
| 0.0075                    | 〃                 | 〃       |
| 0.0082                    | 〃                 | 〃       |
| 0.0091                    | 〃                 | 〃       |
| 0.010                     | 〃                 | 〃       |
| 0.011                     | 〃                 | 〃       |
| 0.012                     | 〃                 | 〃       |
| 0.013                     | 〃                 | 〃       |
| 0.015                     | 〃                 | 〃       |
| 0.016                     | 〃                 | 〃       |
| 0.018                     | 〃                 | 〃       |
| 0.020                     | 〃                 | 〃       |
| 0.022                     | 〃                 | 〃       |
| 0.024                     | 〃                 | 400     |
| 0.027                     | 〃                 | 〃       |
| 0.030                     | 〃                 | 〃       |
| 0.033                     |                   | 〃       |
| 0.036                     |                   | 〃       |
| 0.039                     |                   | 〃       |
| 0.043                     |                   | 〃       |
| 0.047                     |                   | 〃       |
| 0.051                     |                   | 〃       |
| 0.056                     |                   | 〃       |
| 0.062                     |                   | 〃       |
| 0.068                     |                   | 〃       |
| 0.075                     |                   | 〃       |
| 0.082                     |                   | 〃       |
| 0.091                     |                   | 300     |
| 0.10                      |                   | 〃       |

SPECIFICATION

METALLIZED POLYPROPYLENE FILM CAPACITOR

SPEC

P S C 3 1 7 0 0 0

**Packing quantity**

MPEV-1000V. DC (Unit : pcs)

| Capacitance<br>( $\mu$ F) | Standard quantity |         |
|---------------------------|-------------------|---------|
|                           | STYLE-3           | STYLE-6 |
| 0.0010                    | 500               | 500     |
| 0.0011                    | 〃                 | 〃       |
| 0.0012                    | 〃                 | 〃       |
| 0.0013                    | 〃                 | 〃       |
| 0.0015                    | 〃                 | 400     |
| 0.0016                    | 〃                 | 〃       |
| 0.0018                    | 〃                 | 〃       |
| 0.0020                    | 〃                 | 〃       |
| 0.0022                    | 400               | 〃       |
| 0.0024                    | 〃                 | 〃       |
| 0.0027                    | 500               | 500     |
| 0.0030                    | 〃                 | 〃       |
| 0.0033                    | 〃                 | 〃       |
| 0.0036                    | 〃                 | 〃       |
| 0.0039                    | 〃                 | 〃       |
| 0.0043                    | 〃                 | 〃       |
| 0.0047                    | 〃                 | 〃       |
| 0.0051                    | 〃                 | 〃       |
| 0.0056                    | 〃                 | 〃       |
| 0.0062                    | 〃                 | 〃       |
| 0.0068                    | 〃                 | 〃       |
| 0.0075                    | 〃                 | 〃       |
| 0.0082                    | 〃                 | 〃       |
| 0.0091                    | 〃                 | 〃       |
| 0.010                     | 〃                 | 〃       |
| 0.011                     | 〃                 | 〃       |
| 0.012                     | 〃                 | 〃       |
| 0.013                     | 〃                 | 〃       |
| 0.015                     | 〃                 | 〃       |
| 0.016                     | 〃                 | 400     |
| 0.018                     | 〃                 | 〃       |
| 0.020                     | 〃                 | 〃       |
| 0.022                     | 〃                 | 〃       |
| 0.024                     | 400               | 〃       |
| 0.027                     | 〃                 | 300     |
| 0.030                     | 〃                 | 〃       |
| 0.033                     |                   | 400     |
| 0.036                     |                   | 〃       |
| 0.039                     |                   | 〃       |
| 0.043                     |                   | 〃       |
| 0.047                     |                   | 〃       |
| 0.051                     |                   | 〃       |
| 0.056                     |                   | 300     |
| 0.062                     |                   | 〃       |
| 0.068                     |                   | 〃       |
| 0.075                     |                   | 〃       |
| 0.082                     |                   | 〃       |
| 0.091                     |                   | 〃       |
| 0.10                      |                   | 〃       |

SPECIFICATION

METALLIZED POLYPROPYLENE FILM CAPACITOR

SPEC

P S C 3 1 7 0 0 0

**Packing quantity**

MPEV-1250V.DC (Unit : pcs)

| Capacitance<br>( $\mu$ F) | Standard quantity |         |
|---------------------------|-------------------|---------|
|                           | STYLE-3           | STYLE-6 |
| 0.0010                    | 500               | 500     |
| 0.0011                    | "                 | "       |
| 0.0012                    | "                 | "       |
| 0.0013                    | "                 | "       |
| 0.0015                    | "                 | 400     |
| 0.0016                    | "                 | "       |
| 0.0018                    | "                 | "       |
| 0.0020                    | "                 | "       |
| 0.0022                    | 400               | "       |
| 0.0024                    | "                 | "       |
| 0.0027                    | 500               | 500     |
| 0.0030                    | "                 | "       |
| 0.0033                    | "                 | "       |
| 0.0036                    | "                 | "       |
| 0.0039                    | "                 | "       |
| 0.0043                    | "                 | "       |
| 0.0047                    | "                 | "       |
| 0.0051                    | "                 | "       |
| 0.0056                    | "                 | "       |
| 0.0062                    | "                 | "       |
| 0.0068                    | "                 | "       |
| 0.0075                    | "                 | "       |
| 0.0082                    | "                 | "       |
| 0.0091                    | "                 | 400     |
| 0.010                     | "                 | "       |
| 0.011                     | "                 | "       |
| 0.012                     | "                 | "       |
| 0.013                     | "                 | "       |
| 0.015                     | 400               | "       |
| 0.016                     | "                 | 300     |
| 0.018                     |                   | 400     |
| 0.020                     |                   | "       |
| 0.022                     |                   | "       |
| 0.024                     |                   | 300     |
| 0.027                     |                   | 400     |
| 0.030                     |                   | "       |
| 0.033                     |                   | 300     |
| 0.036                     |                   | "       |
| 0.039                     |                   | "       |
| 0.043                     |                   | "       |
| 0.047                     |                   | "       |
| 0.051                     |                   | "       |

SPECIFICATION

METALLIZED POLYPROPYLENE FILM CAPACITOR

SPEC

P S C 3 1 7 0 0 0

**Packing quantity**

MPEV-1600V.DC (Unit : pcs)

| Capacitance<br>( $\mu$ F) | Standard quantity |         |
|---------------------------|-------------------|---------|
|                           | STYLE-3           | STYLE-6 |
| 0.0010                    | 500               | 500     |
| 0.0011                    | "                 | "       |
| 0.0012                    | "                 | "       |
| 0.0013                    | "                 | "       |
| 0.0015                    | "                 | 400     |
| 0.0016                    | "                 | "       |
| 0.0018                    | "                 | "       |
| 0.0020                    | "                 | "       |
| 0.0022                    | 400               | "       |
| 0.0024                    | "                 | "       |
| 0.0027                    | 500               | 500     |
| 0.0030                    | "                 | "       |
| 0.0033                    | "                 | "       |
| 0.0036                    | "                 | "       |
| 0.0039                    | "                 | "       |
| 0.0043                    | "                 | "       |
| 0.0047                    | "                 | "       |
| 0.0051                    | "                 | "       |
| 0.0056                    | "                 | 400     |
| 0.0062                    | "                 | "       |
| 0.0068                    | "                 | "       |
| 0.0075                    | "                 | "       |
| 0.0082                    | "                 | "       |
| 0.0091                    | "                 | "       |
| 0.010                     |                   | "       |
| 0.011                     |                   | "       |
| 0.012                     |                   | 300     |
| 0.013                     |                   | "       |
| 0.015                     |                   | "       |
| 0.016                     |                   | "       |
| 0.018                     |                   | "       |
| 0.020                     |                   | "       |



# Cautions about safety In use of Capacitors

(MPE type)

Registry

HWC 3 1 7 0 0 0

Rev.

0 1

Sheet

1 / 2

When using a capacitor, please use one within the range of the specified values in the specification after checking the environments of using and mounting.

If used beyond the range specified in the specification or the attached cautions, it may lead to short circuit, open, smoking and firing.

Be sure to inquire of us as to the items which are not specified in the specification or are unclear to you.

Also, in case of using capacitors for such equipment or apparatus as may possibly affect human lives like life-support systems, aircraft and automotive control system, etc., please never fail to inquire of us as to further details.

## 1. Operating temperature and humidity

- (1) In actual use, make sure that the operating temperature is within the range specified in the specification.
- (2) Even if the operating temperature is within the specified range, sudden change in the operating temperature may lead to cracks on the enclosure and result in deterioration of the insulation resistance or the increase in tangent of loss angle by absorbing moisture through cracks on the enclosure. Please take good care of the operating temperature.
- (3) Please avoid using a capacitor in high humidity which may lead to the condensation as much as possible.

Even if there are no cracks or damage on an enclosure, deterioration of the insulation resistance or the increase in tangent of loss angle, etc. may be caused by absorbing moisture. Therefore, please be careful when using a capacitor.

## 2. When using a capacitor in a circuit except a d.c. one

When using a capacitor in a circuit except a d.c. one, a capacitor shall be used below the permissible current to frequency.

When used beyond the specified values, the capacitor surface temperature may rise due to the occurrence of corona charge or self heat generation of a capacitor and it may result in a short life, the destruction of the dielectric or the lowering of the insulation resistance.

At worst smoking or firing may be led.

## 3. Soldering

When soldering a capacitor, heat in soldering is conducted to the inside of the capacitor through lead wires and an enclosure.

Therefore soldering at high temperature and for hours may cause deterioration of characteristics or breakdown of a capacitor.

Be sure to solder a capacitor within the range specified in the specification when soldering.

In case of soldering beyond the range recommended by us, please inquire of us as to the details in advance.

- (1) Avoid soldering over again in a short time.

When dipping again in order to correct, dipping must be applied after the temperature of a capacitor comes down to a room temperature and within twice.

- (2) Avoid any work that puts the stress on lead wires of a capacitor such as correction of the position right after soldering.
- (3) When soldering with a soldering iron, please see to it lest a soldering iron should touch the body of a capacitor directly.

|   |   |             |                             |
|---|---|-------------|-----------------------------|
|  | <b>Cautions about safety In use of Capacitors</b> |             | Registry<br>HWC 3 1 7 0 0 0 |
|   | (MPE type)  | Rev.<br>0 1 | Sheet<br>2 / 2              |

#### 4. Mounting

- (1) When inserting a lead wire into the printed circuit board, the stress put on a lead wire shall be within the following range.

Bending of lead wire

When bending a lead wire vertically and then restoring straight, bending of a lead wire in the same place shall be less than two cycles. (One cycle -- bending at 90° and restoring straight)

Twisting of lead wire

Twisting of a lead wire should be carried out within a turn (a 360° turn) in total.

Pulling of lead wire

The load in pulling of a lead wire shall be less than 20N.

In case that the above stress is combined together, the value in application should be set less than half of each value.

- (2) When mounting a capacitor by force owing to the difference of the space between lead wires of a capacitor from the space between the holes on the printed circuit board, be careful. It may cause breakage of a lead wire or cracks on coating resin.
- (3) When mounting a capacitor of large size or a capacitor on the equipment affected by vibrations, fix the body of a capacitor with resin etc. which has no effect on a capacitor. However, resin used for fixing shall be a flame retardant and minimum.
- (4) Mount a capacitor lest it should touch other parts.  
Especially in case of touching a part with self heat generation, a capacitor may deteriorate due to heat and short circuit may be easily caused owing to lowering of dielectric strength or deterioration of the insulation resistance, etc..

#### 5. Cleaning

- (1) When using the solvents for cleaning, use alcohol derivative cleaning solvents (isopropyl alcohol, etc).
- (2) Since a small amount of ingredient contained in flux may lead to corrosion of terminations of the capacitor or chemical change of the capacitor element, be sure to clean a printed circuit board right after soldering.
- (3) The temperature for drying after cleaning shall be less than the maximum operating temperature.
- (4) When cleaning with solvents but alcohol derivatives, please inquire of us in advance.

#### 6. Storing and waste

- (1) Store under the conditions not exceeding -10 °C ~ +40 °C, 75%RH in the room and avoid storing in the place filled with a sudden change in the temperature, the direct sunlight or corrosive gases (hydrogen sulfide, sulfurous acid, chlorine and ammonia, etc.).
- (2) A long-term storage may cause deterioration of characteristics of a capacitor due to absorbing moisture little by little.  
Therefore, be sure to use after checking its characteristics and solderability if stored for over one year.
- (3) As capacitors are classified into industrial waste, please ask experts to dispose of them.

#### 7. The others

Please refer to "Guideline of notabilia for fixed plastic film capacitors for use in electronic equipment" published by Electronic Industries Association of Japan (EIAJ RCR-2350) unless specified in the specification.