

MXH SERIES

UPGRADE

105°C Miniaturized

*Load Life : 105°C 2000 hours.

RoHS compliance



◆SPECIFICATIONS

| Items | Characteristics | | | | | | | | |
|--|--|---------------------|-----------------------------------|--------------------|--|------------------|------------------------------------|------|--|
| Category Temperature Range | -25~+105°C | | | | | | | | |
| Rated Voltage Range | 400~550Vdc | | | | | | | | |
| Capacitance Tolerance | ±20% (20°C, 120Hz) | | | | | | | | |
| Leakage Current(MAX) | $I=3\sqrt{CV}$ (After 5 minutes application of rated voltage) I=Leakage Current(μA) C=Capacitance(μF) V=Rated Voltage(Vdc) | | | | | | | | |
| Dissipation Factor(MAX) (tanδ) | <table border="1"> <tr> <td>Rated Voltage (Vdc)</td> <td>400~450</td> <td>475~550</td> <td>(20°C, 120Hz)</td> </tr> <tr> <td>tanδ</td> <td>0.20</td> <td>0.25</td> <td></td> </tr> </table> | Rated Voltage (Vdc) | 400~450 | 475~550 | (20°C, 120Hz) | tanδ | 0.20 | 0.25 | |
| Rated Voltage (Vdc) | 400~450 | 475~550 | (20°C, 120Hz) | | | | | | |
| tanδ | 0.20 | 0.25 | | | | | | | |
| Endurance | After applying rated voltage with rated ripple current for 2000 hours at 105°C, the capacitors shall meet the following requirements. <table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±20% of the initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </table> | Capacitance Change | Within ±20% of the initial value. | Dissipation Factor | Not more than 200% of the specified value. | Leakage Current | Not more than the specified value. | | |
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| Dissipation Factor | Not more than 200% of the specified value. | | | | | | | | |
| Leakage Current | Not more than the specified value. | | | | | | | | |
| Low Temperature Stability Impedance Ratio(MAX) | <table border="1"> <tr> <td>Rated Voltage (Vdc)</td> <td>400~450</td> <td>475~550</td> <td>(120Hz)</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>8</td> <td>12</td> <td></td> </tr> </table> | Rated Voltage (Vdc) | 400~450 | 475~550 | (120Hz) | Z(-25°C)/Z(20°C) | 8 | 12 | |
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| Z(-25°C)/Z(20°C) | 8 | 12 | | | | | | | |

◆MULTIPLIER FOR RIPPLE CURRENT

| Frequency (Hz) | 60(50) | 120(100) | 300 | 500 | 1k | 10k≤ |
|----------------|--------|----------|------|------|------|------|
| Coefficient | 0.80 | 1.00 | 1.15 | 1.20 | 1.25 | 1.40 |

◆OPTION

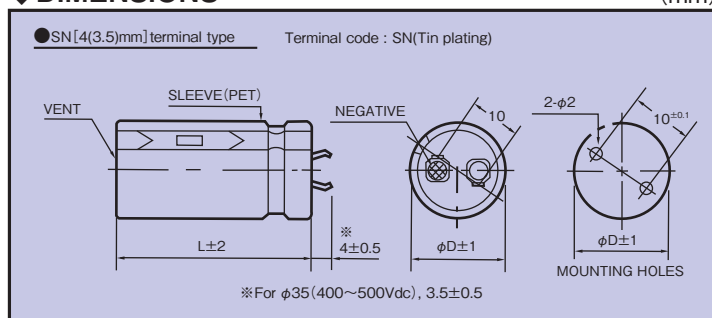
| | Code |
|--------------------------|------|
| PET Sleeve without plate | EFC |

◆PART NUMBER

□□□ / MXH / □□□□□ / M / □□□ / SN / DXL
 Rated Voltage Series Capacitance Capacitance Tolerance Option Terminal Code Case Size

◆DIMENSIONS

(mm)



◆ STANDARD SIZE

| Vdc Cap(μF) φD | 400 | | | | | | | 420 | | | | | | | | |
|----------------------|-------|------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| | φ22 | φ25 | φ30 | φ35 | φ35 | φ30 | φ25 | φ22 | φ25 | φ30 | φ35 | φ35 | φ30 | φ25 | φ22 | |
| 100 | | | | | | | | 22×25 | 0.85 | | | | | | | |
| 120 | 22×25 | 0.92 | | | | | | 22×30 | 0.98 | | | | | | | |
| 150 | 22×30 | 1.08 | | | | | | 22×30 | 1.06 | 25×25 | 1.04 | | | | | |
| 180 | 22×30 | 1.15 | 25×25 | 1.12 | | | | 22×35 | 1.20 | 25×30 | 1.20 | | | | | |
| 220 | 22×35 | 1.32 | 25×30 | 1.30 | | | | 22×40 | 1.37 | 25×30 | 1.28 | 30×25 | 1.24 | | | |
| 270 | 22×40 | 1.50 | 25×35 | 1.49 | 30×25 | 1.33 | | 22×50 | 1.62 | 25×35 | 1.47 | 30×30 | 1.44 | 35×25 | 1.32 | |
| 330 | 22×50 | 1.76 | 25×40 | 1.68 | 30×30 | 1.55 | 35×25 | 1.44 | 22×60 | 1.87 | 25×45 | 1.75 | 30×35 | 1.65 | 35×30 | 1.56 |
| 390 | 22×55 | 1.94 | 25×45 | 1.86 | 30×35 | 1.75 | 35×30 | 1.63 | | | 25×50 | 1.93 | 30×40 | 1.84 | 35×30 | 1.62 |
| 470 | | | 25×50 | 2.07 | 30×40 | 1.97 | 35×30 | 1.68 | | | 25×60 | 2.21 | 30×45 | 2.05 | 35×35 | 1.86 |
| 560 | | | 25×60 | 2.37 | 30×45 | 2.18 | 35×35 | 1.92 | | | | | 30×50 | 2.25 | 35×40 | 2.10 |
| 680 | | | | | 30×50 | 2.41 | 35×40 | 2.15 | | | | | 30×60 | 2.59 | 35×45 | 2.29 |
| 820 | | | | | 30×60 | 2.76 | 35×45 | 2.37 | | | | | | | 35×50 | 2.50 |
| 1000 | | | | | | | 35×55 | 2.78 | | | | | | | 35×60 | 2.88 |
| 1200 | | | | | | | 35×60 | 2.95 | | | | | | | | |

| Vdc Cap(μF) φD | 450 | | | | | | | 475 | | | | | | | |
|----------------------|-------|------|-------|------|-------|------|-------|-------|------|-------|------|-------|------|-------|------|
| | φ22 | φ25 | φ30 | φ35 | φ35 | φ30 | φ25 | φ22 | φ25 | φ30 | φ35 | φ35 | φ30 | φ25 | φ22 |
| 68 | | | | | | | | 22×25 | 0.67 | | | | | | |
| 82 | | | | | | | | 22×30 | 0.77 | | | | | | |
| 100 | 22×25 | 0.85 | | | | | | 22×35 | 0.88 | 25×25 | 0.83 | | | | |
| 120 | 22×30 | 0.98 | 25×25 | 0.96 | | | | 22×40 | 0.99 | 25×30 | 0.96 | | | | |
| 150 | 22×35 | 1.13 | 25×30 | 1.12 | | | | 22×45 | 1.14 | 25×35 | 1.10 | 30×25 | 1.04 | | |
| 180 | 22×40 | 1.28 | 25×30 | 1.20 | 30×25 | 1.18 | | 22×50 | 1.27 | 25×40 | 1.24 | 30×30 | 1.19 | 35×25 | 1.15 |
| 220 | 22×45 | 1.44 | 25×35 | 1.37 | 30×30 | 1.36 | | 22×60 | 1.47 | 25×45 | 1.40 | 30×35 | 1.36 | 35×30 | 1.33 |
| 270 | 22×50 | 1.61 | 25×40 | 1.56 | 30×30 | 1.44 | 35×25 | 1.33 | | 25×55 | 1.62 | 30×40 | 1.54 | 35×35 | 1.52 |
| 330 | 22×60 | 1.86 | 25×50 | 1.82 | 30×35 | 1.64 | 35×30 | 1.54 | | | | 30×45 | 1.73 | 35×40 | 1.71 |
| 390 | | | 25×55 | 2.01 | 30×40 | 1.83 | 35×35 | 1.76 | | | | 30×55 | 1.98 | 35×40 | 1.79 |
| 470 | | | 25×60 | 2.21 | 30×45 | 2.05 | 35×40 | 1.97 | | | | 30×60 | 2.18 | 35×50 | 2.09 |
| 560 | | | | | 30×50 | 2.26 | 35×45 | 2.18 | | | | | | 35×55 | 2.29 |
| 680 | | | | | 30×60 | 2.59 | 35×50 | 2.38 | | | | | | | |
| 820 | | | | | | | 35×60 | 2.74 | | | | | | | |

| Vdc Cap(μF) φD | 500 | | | | | | | 550 | | | | |
|----------------------|-------|------|-------|------|-------|------|-------|-------|-------|-------|-------|------|
| | φ22 | φ25 | φ30 | φ35 | φ35 | φ30 | φ25 | φ30 | φ35 | φ35 | φ30 | |
| 56 | 22×25 | 0.63 | | | | | | | | | | |
| 68 | 22×30 | 0.72 | | | | | | | | | | |
| 82 | 22×30 | 0.80 | 25×25 | 0.78 | | | | | | | | |
| 100 | 22×35 | 0.92 | 25×30 | 0.90 | | | | 30×25 | 0.8 | | | |
| 120 | 22×40 | 1.03 | 25×35 | 1.02 | 30×25 | 0.97 | | 30×30 | 0.93 | 35×25 | 0.92 | |
| 150 | 22×50 | 1.20 | 25×40 | 1.17 | 30×30 | 1.13 | 35×25 | 1.09 | 30×35 | 1.07 | 35×30 | 1.05 |
| 180 | 22×60 | 1.37 | 25×45 | 1.31 | 30×35 | 1.28 | 35×30 | 1.26 | 30×40 | 1.21 | 35×30 | 1.14 |
| 220 | | | 25×50 | 1.46 | 30×40 | 1.45 | 35×35 | 1.44 | 30×45 | 1.36 | 35×35 | 1.3 |
| 270 | | | 25×60 | 1.70 | 30×45 | 1.63 | 35×35 | 1.52 | 30×55 | 1.57 | 35×40 | 1.47 |
| 330 | | | | | 30×50 | 1.81 | 35×40 | 1.71 | | | 35×50 | 1.72 |
| 390 | | | | | 30×60 | 2.06 | 35×50 | 1.99 | | | 35×55 | 1.88 |
| 470 | | | | | | | 35×55 | 2.19 | | | | |

↑ ↑
Ripple Current (A r.m.s./120Hz, 105°C)
Case Size φD×L(mm)