



东莞市威庆电子有限公司

DONGGUAN WEIQING ELECTRONIC CO., LTD

SPEC NO.:2019100802

REV:B

承认书

SPECIFICATION

客户名称(CUSTOMER): 深圳市立创电子商务有限公司

产品名称(PRODUUCT NAME): 安规电容 (MPX X2) LOGO: WQC

承认规格(APPROVE ITEM): 105K/310VAC P=22.5MM L=23MM E6 盒 黄色

威庆料号(WEIQING PART NO.): C50Q3105KE6L230210

客户料号(CUSTOMER PART NO.): C216476

送样日期(SUBMIT THE SAMPLE DATE):

产品尺寸(PRODUUCT SIZE): W:26MM H:21.5MM T:12MM

样品印字(SAMPLE PRINT): WQC 品牌

威庆确认表

WEIQING CONFIRM LIST

APPROVED	CHECKED	PREPARED
 BASE	陶贵能	张雪

客户承认结果

CUSTOMER ACKNOWLEDGE THE RESULT

地址: 中国东莞松山湖高新技术产业开发区科技十路7号12栋

Add: Buiding 12.No.Tenth Road of Science&Technolgy,DongGuan SongShanLake High-tech Industrial Development Zone China

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WQC 东莞市威庆电子有限公司		制作日期	2019-10-08	版本	02
档案名称	MPX Approval Sheet-WEIQING(WQC) (BOX-TYPE Metallized Polypropylene Film Interference Suppression Capacitor)	文件编号	WQ-AP-066	页次	9/1

1. Scope:
This specification applied to capacitor for type MPX(BOX-TYPE Metallized Polypropylene Film Interference Suppression Capacitor)

2. Operation Temperature:
-40℃ ~ +110℃

3. Capacitance Range:
0.001uF ~ 3.3uF

4. Capacitance Tolerance:
±5%(J)、±10%(K)、±20%(M)

5. Rated Voltage:
275VAC / 300VAC / 310VAC (50~60 Hz)

6. Approvals File No

Related Standard		Certificate No	Approved Monogram
UL	IEC/EN 60384-14	E466405	 (USA)
ENEC	IEC/EN 60384-14	40040406	 (EU)
VDE	IEC/EN 60384-14	40040406	 (Germany)
CQC	GB/T6346.14-2015	CQC18001189336	 (China)
KTL	KC60348-14(2015-09) KC60384-1 (2015-09)	SU03073-14001B SU03073-14002B SU03073-14003B SU03073-16001A	 (South Korea)

WQC 东莞市威庆电子有限公司		制作日期	2015-10-28	版本	02
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7. 产品编码说明 Film Capacitor Part number system

18 位元产品代码如下:

The 18 digits part number is formed as follow:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
C	5	0	Q	3	1	0	5	K	E	6	L	2	3	0	A	1	0

Digit 1~3 Type Code

第 1~3 位 型号代码

代码 Code	型号 Type	代码 Code	型号 Type	代码 Code	型号 Type	代码 Code	型号 Type
C11		C30		C40	MKP62(D85)X2	C50	MKP62(X2)
C12		C31		C41	MKP62(RC)X2	C51	MKP62+R
C20		C32		C42	MKP64(D85)X1	C52	MKP64(X1)
C21		C33		C43		C53	
C22		C34		C44		C54	
C23		C35		C45			
C24		C36		C46			

型号代码说明

代码 Code	型号 TYPE	备注 NOTS
电容降压专用电容器 A.C.Capacitors For Capacitive Divider		
C40	MKP62	电容降压专用金属化聚丙烯膜交流 (X2 盒装) 电容器
C41	MKP62(THB)	金属化聚丙烯膜抗干扰电容器 (X2 盒装 THB 防潮系列双 85 系列)
C42	MKP64(THB)	金属化聚丙烯膜抗干扰电容器 (X1 盒装 THB 防潮系列双 85 系列)
抑制电源电磁干扰电容器 Inerferenc Suppression Capacitors		
C50	MKP62	金属化聚丙烯膜抗干扰电容器(Class-X2)
C51	MKP62+R	金属化聚丙烯膜抗干扰电容器(带放电电阻 Class-X2)
C52	MKP64	金属化聚丙烯膜抗干扰电容器(带放电电阻 Class-X1, 380Vac)

Digit 4~5 Rated Voltage Code

第 4~5 额定电压代码

	A	B	C	D	E	F	G	H	J	K	L	M	N
1			16	20				50	63			1100	
2	100	125	160	200	250	315	400	500	630	800	120		
3	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	1200	1400	
	P	Q	R	S	T	U	V	W	X	Y			
1	240	300	330	440	540	600	700	850	900				
2	275	305	350	450	520		760						
3	280	310		480									

说明: 参考日本 JIS 标准, 字母加数位元表示交流, 数位元加字母表示直流, 例如 A2 表示 100VAC, 2A 表示 100VDC
Explanation: Refer to JIS standard, Letter and then number indicate AC, but number and then Letter indicate DC, for example, 2A indicate 100VDC, A2 indicate 100VAC.

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Digit 6~8 Capacitance Expressed in 3-digit code 3 Code 第 6~8 容值代码 The first 2digits indicate significant figures,and the third digit specifies the number of zero to follow. 前两位表示基数，第三个数位表示其后零的个数 This gives the capacitance in picofarads.容量值单位元为皮法 For examples 举例： 102=10*10 ² PF=1,000PF=1.0nF=0.001uF 105=10*10 ⁵ PF=1,000,000PF=1000nF=1uF									
Digit 9 Capacitance Tolerance Code 第 9 容量偏差代码									
公差 Tolerance		±1%	±2%	±3%	±5%	±10%	±20%	+80%/-20%	
代码 Code		F	G	H	J	K	M	Z	
Digit 10~11 Box Case No. Or Pitch expressed by Case two digits Code 第 10~11 盒体或两个数位的脚距代码 Box Type 盒装型 (壳体尺寸对应表如规格书的第 8 页：The corresponding table of shell size is shown on page 8 of the specification)									
7.5	10	12.5	15	20	22.5	27.5	37.5	42.5	55
B*	C*	G*	D*	S*	E*	F*	J*	K*	P*
Powder Coating Type 粉涂型									
Pitch 脚距	2.5	5.0	7.5	10	15	20	22.5	27.5	
Case No. 脚距代码	02	05	07	10	15	20	22	27	
Axial Type 轴向型									
Code 代码		Axial Type 轴向型							
A1		轴向椭圆形							
A2		轴向圆形							
Digit 12 Lead Form Code 第 12 引线加工型代码 Lead Type									
Code 代码	L	H	K	N	M	T	S		
Lead Type 引线型式	长脚	短脚	内弯青蛙脚	内弯直脚	外弯直脚	Taping	Customer Special Require		
Digit 13~14 Lead Length(Straight) and Tolerance of Lead Length(straight): Expressed in 3-Letter Code 第 13~15 引线长度和偏差以 3 个数位代码表示 Example 举例：Code 代码 035:35/10=3.5mm 230:230/10=23mm									
Digit 16~18 Internal use packing\material group\place of production\ product grade\Environmental Protection(EP) Class (Halogen-Free Compliant ROHS Compliant) Code 第 16~18 内部特征码									

8. Specifications (IEC60384-14)

No	Test items	Performance	Test Method
8-1	Withstand voltage (Between Terminals)	Shall be no abnormality	1200VDC Test Of 1~5sec.
	Between terminal and Enclosure	Shall be no abnormality	UR×200%+1500VAC, 60sec.
8-2	Insulation resistance (Between Terminals)	$C_R \leq 0.33\mu F$ $IR \geq 15,000M\Omega$ $C_R > 0.33\mu F$ $IR \geq 5,000M\Omega \div$ C(uF)	Measured at 100±15VDC, For 60sec / 25℃
8-3	Capacitance	Within the tolerance specified	1KHz, 1Vrms Max. at 25℃
8-4	Dissipation Factor	0.001 (0.1%) Max.	1KHz, 1Vrms Max. at 25℃
8-5	Tense Strength of Terminal	No wire breakage and No Damage of Capacitor	1. Load Force : 1.0 Kg 2. Holding Time : 10 ± 1sec
8-6	Bending Strength of Terminal	No wire breakage and No Damage of Capacitor	1. Load Force : 0.5 Kg 2. Bending Time : 4 x 90° in 5sec
8-7	Vibration	(1) Appearance : No Visible Damage (2) Contact : Normal	a. Frequency change : 1min. per cycle 10~55~10Hz b. Vibration distance : 1.5mm c. course: X、Y、Z (axis) d. Time : 2h / axis (6h in total)
8-8	Solder-ability	95% Of The Surface Tinning	a. Solder temperature: 270±5℃ b. Solder time: 2±0.5sec



东莞市威庆电子有限公司

制作日期

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档案名称

MPX Approval Sheet-WEIQING(WQC)
(BOX-TYPE Metallized Polypropylene Film
Interference Suppression Capacitor)

文件编号

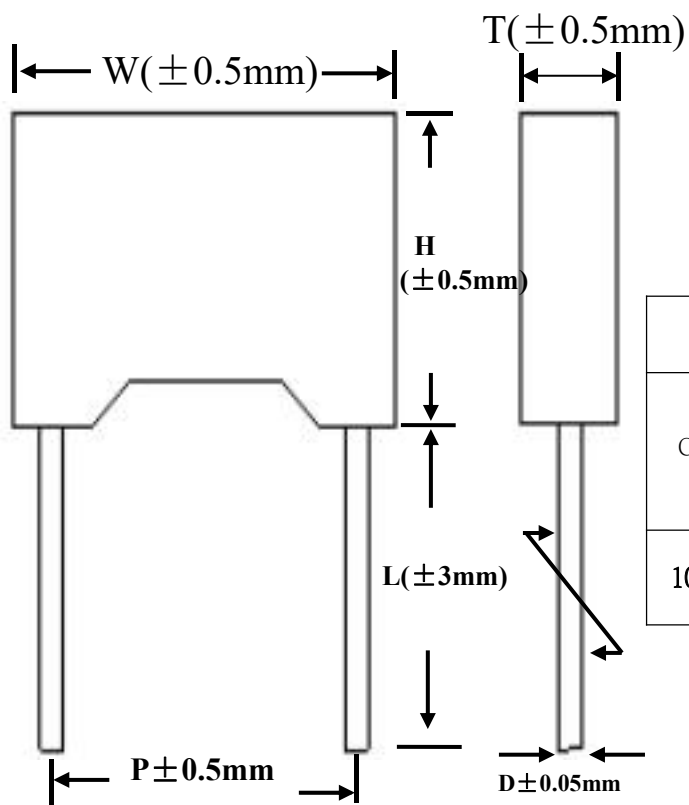
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8-9	Heat Shock test	(1) Appearance : No Visible Damage (2) Withstand Voltage : Normal (3) Capacitance Change : $\leq \pm 3\%$ of The Initial Value	The terminal of capacitor shall be immersed in the melting solder. a. Solder temperature: $270 \pm 5^\circ\text{C}$ b. Solder time: $3 \pm 0.5\text{sec}$
8-10	Cold Resistance	(1) Appearance : No Visible Damage (2) Capacitance Change : $\leq 0 \sim -10\%$ of The Initial Value	a. Test Temperature: -40°C b. Test Times: 2Hrs
8-11	Dry Heat Resistance	(1) Appearance : No Visible Damage (2) Withstand Voltage : Normal (3) Capacitance Change : $\leq +5 \sim -2\%$ Of The Initial Value (4) Insulation Resistance: $\geq 50\%$ of the rated value	a. TEST TEMPERATURE: $110^\circ\text{C} \pm 2^\circ\text{C}$ b. Test Times: 2Hrs
8-12	Humidity Resistance	(1) Appearance : No Visible Damage (2) Withstand Voltage : Normal (3) Capacitance Change : $\leq \pm 1\%$ of The Initial Value (4) Insulation Resistance: $\geq 50\%$ of the rated value (5) DF ($\tan \delta$) ≤ 0.001	a. TEST TEMPERATURE: $40^\circ\text{C} \pm 2^\circ\text{C}$ b. RELATIVE HUMIDITY: $90 \sim 95\%$ c. Test Times: $500 \pm 24\text{HRS}$
8-13	Heat Resistance (Charge & Discharge)	(1) Appearance : No Visible Damage (2) DF ($\tan \delta$) ≤ 0.001 (3) Capacitance Change : $\pm 10\%$ of The Initial Value (4) Insulation Resistance: $\geq 50\%$ of the rated value	a. Test Voltage : Rated Voltage Charge for 2 sec. Discharge for 2 sec. Repeated For 1000 ± 100 cycles b. Test Temperature: $110^\circ\text{C} \pm 2^\circ\text{C}$
8-14	Heat Resistance (Continuous)	(1) Appearance : No Visible Damage (2) DF ($\tan \delta$) ≤ 0.002 (3) Capacitance Change : $\pm 10\%$ of The Initial Value (4) Insulation Resistance: $\geq 50\%$ of the rated value	a. Test Voltage : 125% of The Rated Voltage for 1000Vrms for 0.1s every one hour during tset. b. Test Temperature: $110^\circ\text{C} \pm 2^\circ\text{C}$ c. Test Times: $1008 \pm 24\text{Hrs}$

9. Dimensions:



CAPACITOR BODY SIZE (Unit:mm)

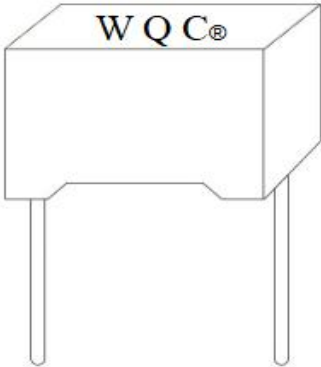
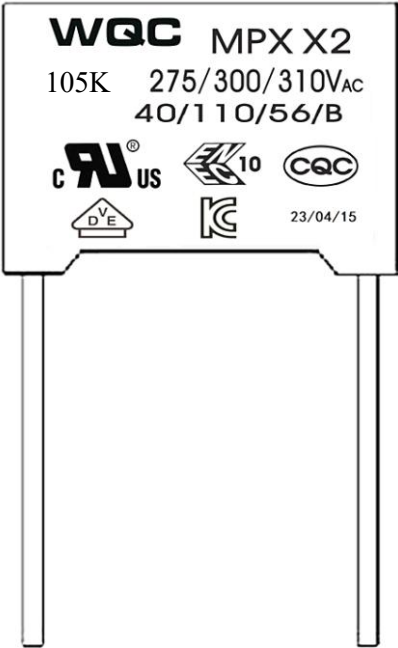
CAP	RV	BOX TYPE	W ± 0.5	H ± 0.5	T ± 0.5	D ± 0.05	L ± 3	P ± 0.5
105K	310V	E6	26	21.5	12	0.8	23	22.5

Lead Style

L	H	K	N	M	T	S
					TAPING (refer to next page)	Customer Require
CAP	RV	Lead Style	L model-A section $\pm 3\text{mm}$ H.K.N.M model-A section $\pm 0.5\text{mm}$	K.N.M model-B section $\pm 0.5\text{mm}$	$P(\pm 0.5\text{mm})$	
105K	310V	L	23mm		22.5mm	

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10. Marking:



WQC	WEIQING CO. LOGO
105	CAPACITANCE
K	CAPAC.ITANCE TOLERANCE
275/300/310	RATED VOLTAGE
VAC	AC VOLTAGE
MPX X2	BOX-TYPE METALLIZED POLYPROPYL ENE FILM
40/110/56	Working Lowest Temperature (- 40℃) Working highestTemperature(+110℃) Working Times (56days)
B	Class of operation
备注	盒子顶部有 WQC(LOGO)

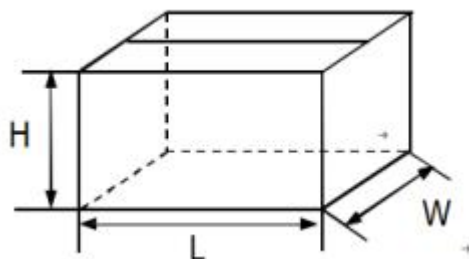
11.Storage conditions and duration

Packaged capacitors should be kept in clean, ventilated, dry coffers, not near the heat source, not subject to direct sunlight, is strictly prohibited and chemical reagents, acid and harmful gas storage together.

Capacitor at a temperature within the range 20 ~ 25 ℃, humidity less than 50% of the state of storage for one year.

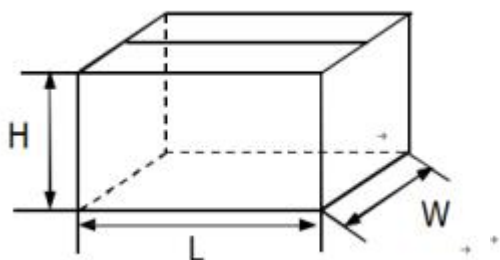
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12. 包装箱尺寸 Packing box size:



散装外箱尺寸

L:375mm
W:235mm
H:237mm



散装内箱尺寸

L:225mm
W:185mm
H:210mm

13. 标签打印形式 Label printing form:

备注：订单编号、物料代号、物料规格、生产日期根据实际出货的规格及客户不同及生产日期进行相应变动。

The order number: material code, material specification and production date will be changed according to the actual shipping specifications, different customers and production date

内箱标签如下：

The inner box label is as follows



外箱标签如下：

The label of the outer box is as follows



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Guideline Of Notabilia For The Usage Of Plastic Film Capacitors
薄膜电容器的使用上注意事项及指导

Plastic film capacitors use organic films for their dielectrics, thus the capacitors may fume of flame, depending on the circuit conditions they are in, when they are damaged by applying over-voltage or over-current.

塑胶薄膜电容器使用有机薄膜为介质，当使用超过额定电压及额定电流，可能产生火焰，导致电容损坏，故请使用于正确的回路。

1. Circuit Design 回路设计

- ① Please use capacitors within the range of their characteristic ratings, only after confirming their operating and mounting environments.
请确认电容器的使用范围仅止于明定之额定特性规范，请先确认电容器使用之环境是否符合规范。
- ② In case of selecting a capacitor, please select the most suitable one which fits to your operating conditions.
请依照适合的作业条件选择相对应的电容器使用。
- ③ Capacitors used for Across-The-Line, Line-By-Pass and Antenna-Coupling to suppress noises in an equipment, the capacitors need to be approved by overseas Safety Standards or 'Electric Appliance and Material Control' by Ministry of international Trade and Industry.
电容器用于跨接，旁路回路及天线耦合等抑制噪音的装置，需通过海外安全标准或日本通商产业省之电器用品安全法。
- ④ An applying voltage to a capacitor, including the peak of surge and ripple voltage (D.C. voltage + A.C. Peak), cannot be exceeded the rating voltage.
电容器之应用电压，包括突波和纹波电压的峰值(直流电压+交流峰值)不可超过额定电压。
- ⑤ Do not apply a current over its permissible level. Also, make sure the check the surrounding temperature and inherent temperature rise of a capacitor since a permissible current can be restricted by those factors.
切勿使用超出电容器可承载之电流并检查电容器周围之温度，因有许多因素会影响电流之变化，进而造成电容器之温度上升。
- ⑥ If the resonance noise (more than 60 dB during the day and more than 50 dB at night) of ordinary national standard capacitors, please contact Weiqing electronics. Products without abnormal sound shall be specified separately.
如普通国标电容器的发出共振(白天超过60分贝、夜间是50分贝以上嗡嗡)之噪音时，请与威庆电子联系。无异音产品另行规定。
- ⑦ Do not conduct a rapid charge and discharge to a capacitor which may lead to characteristics degradations or break down of the capacitor.
请不要对电容器进行快速的充电和放电，此可能会导致电容器之特性退化或损坏。

2. Mounting 安装

- ① Do not apply any exceeding tension or torsion to lead wires of a capacitor, during the mounting process.
请不要使用任何超过电容导线可承受之张力进行插件。
- ② Please mount a capacitor where it dose not contact any other heating parts, high voltage parts and other parts.
请确认电容器使用环境，避免接触任何其他升温热物件,高压和其他部分料件。
- ③ Please conduct soldering process by strictly following the specified conditions.
进行焊接过程实，请严格遵循指定之焊接条件。

3. Case of an emergency 紧急情况

- ① If a fuming, a flaming or an usual smell occurs from an equipment during its usage, please cut off the power supply by switching it off, pulling the plug out or other methods.
如使用设备有冒烟，火花或冒出不寻常之气味，请切断电源，拔掉插头或以其它方法关闭设备。

4. Storing and handling 储存和处理

- ① A storage needs to be kept indoors at -10~+40℃ and relative humidity of under 75% without any sudden temperature changes, direct sunlight and corrosive gas around.