

东莞市全鹏电子科技有限公司
DONGGUON CHAMPION ELECTRONIC TECHNOLOGY CO., LTD.

承認書 (APPROVAL SHEET)

品名 PART NAME	METALLIZED POLYPROPYLENE FILM CAPACITOR (MPP-QP)	
承認規格 APPROVE ITEM	473J 250V P7.5	104J 250V P7.5
全鵬料號 CHAMPION PART NO	MPP 473J0250D080804B0815	MPP 473J0250D080905B0815
客戶名稱 CUSTOMER	艾貝仕科技	
客戶料號 PART NO		
送樣承認日期 DATE	2019.12.12	

承認印
APPROVAL STAMP

供應商 VENDER	客戶 CUSTOMER
东莞市全鹏电子科技有限公司 联系人：党夏辉 联系电话：15017853041 东莞市茶山镇卢边恒兴昌工业园 TEL:0769-86862908 FAX:0769-86862918 www.champion-dg.com	

东莞市全鹏电子科技有限公司		制作日期	2019-12-12	版本	01
文件名稱	MPP Approval Sheet-QP (MPP-TYPE Metallized Polypropylene Film Interference Suppression Capacitor)	文件編號	QP-AP-28	頁次	06/01

1. Scope:

This specification applied to capacitor for type MPP (Metallized Polypropylene Film Capacitor)

2. Operation Temperature:

-40°C ~ +105°C

3. Capacitance Range:

0.001uF ~ 15 uF

4. Capacitance Tolerance:

±2%(G)、±3%(I)、±5%(J)、±10%(K)、±20%(M)

5. Rated Voltage:

250VDC 275VDC 400VDC 450VDC 675VDC

6. champion Part No.:

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 1 2 3 4 5 6 7 8 9
 (tape) (capacitance) (tolerance) (rated voltage) (Dc/Ac) (Size) (lead forming) (lead pitch) (lead length)

6-1 tape:

Code	PEI	MEF	MEM	MPP	PEN	PPN	PPS	MXY	MEC	MET
Tape	PEI	MEF	MEM	MPP	PEN	PPN	PPS	X2	MEC	MET

6-2 Capacitance:

Code	101	102	103	104	105	106
Capacitance	0.0001uF	0.001uF	0.01uF	0.1uF	1uF	10uF

6-3 Tolerance:

Code	F	G	H	I	J	K	M
Tolerance	±1%	±2%	±2.5%	±3%	±5%	±10%	±20%






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6-4 Rated Voltage: Showing the real working voltage indicated. For example: 0630 -> 630V, 1000 -> 1KV。

6-5 D→DC; A→AC

6-6 Size:100906→(W)10*(H)9*(T)6

6-7 Lead forming:

Code	B	K	R	U	W	T	S
Lead Forming						TAPING	Customer Special Require

6-8 Lead Pitch: Showing the capacitor lead pitch, For example:

Code	08	10	15	20	28
Pitch(mm)	7.5mm	10mm	15mm	20mm	27.5mm

6-9 Lead length: Showing the capacitor lead Length, For example:

Code	04	08	10	13	23	30	40
Length(mm)	4mm	8mm	10mm	13mm	23mm	30mm	40mm

7. Specifications (JIS 5115、IEC384-16)

No	Test items	Performance	Test Method
7-1	Withstand voltage (Between Terminals)	Shall be no abnormality	150% Of Rated Voltage, 60sec.
	Between terminal and Enclosure	Shall be no abnormality	UR×200%+1000VDC, 60sec.
7-2	Insulation resistance (Between Terminals)	$C_R \leq 0.33\mu F$ $IR \geq 15,000M\Omega$ $C_R > 0.33\mu F$ $IR \geq 5,000 (M\Omega \cdot \mu F)$	Measured at $100 \pm 15VDC$, For 60sec / 25°C

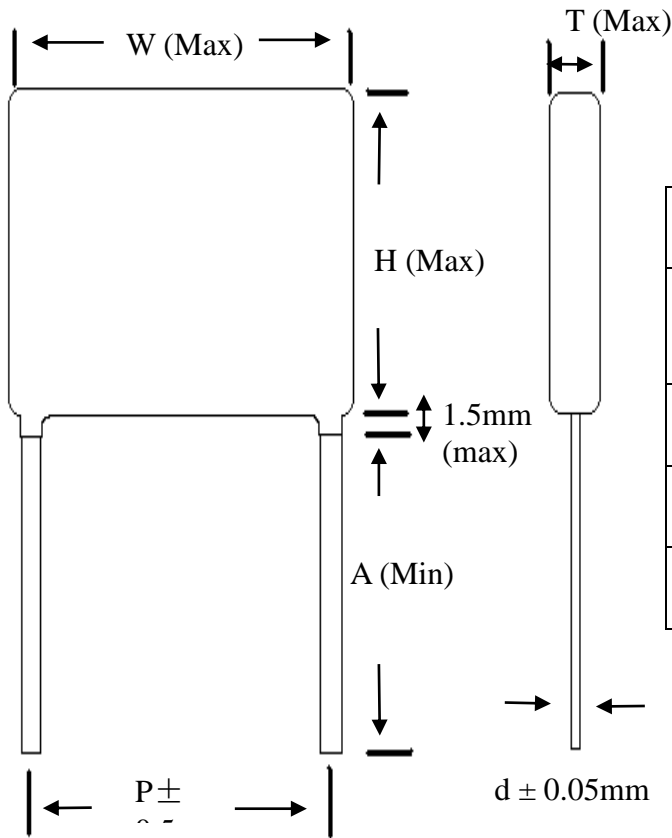
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No	Test items	Performance	Test Method
7-3	Capacitance	Within the tolerance specified	1KHz, 1Vrms Max. at 25°C
7-4	Dissipation Factor	0.001 (0.1%) Max.	1KHz, 1Vrms Max. at 25°C
7-5	Tense Strength of Terminal	No wire breakage and No Damage of Capacitor	1. Load Force : 1.0 Kg 2. Holding Time : 10 ± 1sec
7-6	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
7-7	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)
7-8	Solder-ability	75% Of The Surface Tinning	a. Solder temperature: 230±5°C b. Solder time: 2±0.5sec
7-9	Heat Shock test	(1) Appearance : No Visible Damage (2) Withstand Voltage : Normal (3) Capacitance Change : ≤ ±3% of The Initial Value	The terminal of capacitor shall be immersed in the melting solder. a. Solder temperature: 230±5°C b. Solder time: 3±0.5sec c. Test Voltage: 150% of The Rate Voltage For 1min.

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No	Test items	Performance	Test Method
7-10	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
7-11	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: $C_R \leq 0.33\mu\text{F}$ IR $\geq 2,700\text{M}\Omega$ $C_R > 0.33\mu\text{F}$ IR $\geq 900\text{M}\Omega$	a. TEST TEMPERATURE: $105^{\circ}\text{C} \pm 2^{\circ}\text{C}$ b. Test Times: 2Hrs
7-12	Humidity Resistance	(1) Appearance : No Visible Damage (2) Withstand Voltage : Normal (3) Capacitance Change : $\leq \pm 10\%$ of The Initial Value (4) Insulation Resistance: $C_R \leq 0.33\mu\text{F}$ IR $\geq 2,700\text{M}\Omega$ $C_R > 0.33\mu\text{F}$ IR $\geq 900\text{M}\Omega$ (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: $240 \pm 8\text{HRS}$ d. TEST VOLTAGE: 130% of The Rated Voltage for 1 min.
7-13	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: Over $3000\text{M}\Omega$	a. Test Voltage : Rated Voltage Charge for 2 sec. Discharge for 2 sec. Repeated For $100,000 \pm 1000$ cycles b. Test Temperature: $105^{\circ}\text{C} \pm 2^{\circ}\text{C}$
7-14	Heat Resistance (Continuous)	(1) Appearance : No Visible Damage (2) DF ($\tan \delta$) ≤ 0.001 (3) Capacitance Change : $\pm 7\%$ of The Initial Value (4) Insulation Resistance: Over $3000\text{M}\Omega$	a. Test Voltage : 125% of The Rated Voltage b. Test Temperature: $105^{\circ}\text{C} \pm 2^{\circ}\text{C}$ c. Test Times: $500 \pm 24\text{Hrs}$

8. Dimensions:



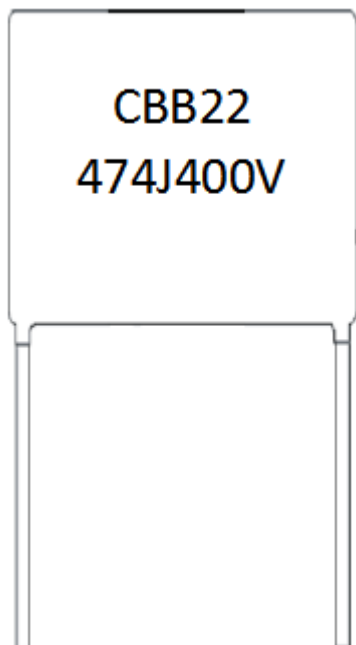
CAPACITOR BODY SIZE (Unit:mm)					
CAP	RV	W (±0.5)	H (±0.5)	T (±0.5)	D (±0.05)
473	250	8.5	9	4	0.6
104	250	8.5	9.5	4.5	0.6

Lead Style

B		K	R	U	W	T	S
						TAPING (refer to next page)	Customer Require
CAP	RV	Lead Style	A(±0.05mm)		B(±0.05mm)		
473	250	B	15			7.5	
104	250	B	15			7.5	

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9. Marking:



CBB22	金属化薄膜电容
474	CAPACITANCE
J	CAPACITANCE TOLERANCE
400V	RATED VOLTAGE