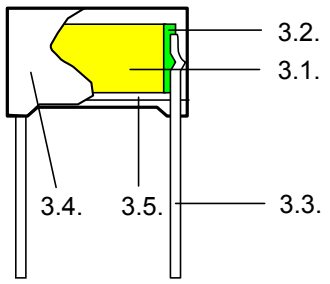
PRODUCT SPECIFICATIONS **TYPE :** Y2

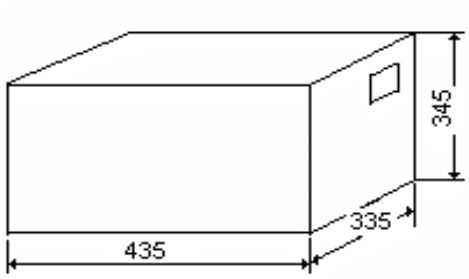
NO.	ITEM	DESCRIPTIONS
1.	**SCOPE**	This specifications cover the requirements of DIYA's Metallized Polypropylene Film AC Capacitor (Interference Suppressors Class-Y2) Type : Y2
2.	**PARTS NUMBER CODE**	
	Y2 - 250VAC - 472 - K - P10 **Type / Rated Volvage / Capacitance / Tolerance / Pitch** 型号 额定电压 容 量 误 差 脚 距	
3.	**CONSTRUCTION**	
3.1.	DIELECTRIC	Metallized Polypropylene Film
3.2.	METAL SPRAY	Special Solder
3.3.	LEAD WIRE	Copper-clad Steel Wire
3.4.	PLASTIC CASE	UL94V-0
3.5.	EPOXY RESIN	UL94V-0
4.	**MARKING**	
4.1.	TYPE	"Y2"
4.2.	CAPACITANCE	"472" to "0.0047μF"
4.3.	TOLERANCE	"K" to "±10%"
4.4.	RATED VOLTAGE	"250V~" to 250VAC"
4.5.	MARKING COLOR	Black
5.	**STANDARD ATMOSPHERIC CONDITIONS FOR MAKING MEASUREMENTS**	
5.1.	AMBIENT TEMPERATURE	15℃ to 35℃ (If there is any doubt on the results, the measurements shall be made at +20 +/- 5℃.)
5.2.	RELATIVE HUMIDITY (R.H.)	45% to 75% (If there is any doubt on the results, the measurements shall be made at 45% to 75%.)
5.3.	AIR PRESSURE	86 kpa to 106 kpa.
5.4.	OPERATING TEMPERATURE RANGE	-40℃ to +110℃ for which the capacitor can be operated continuously at rated voltage.



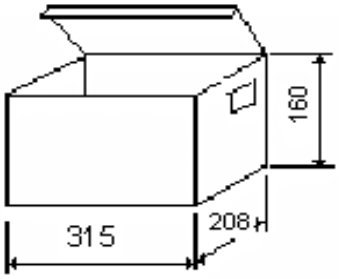
PRODUCT SPECIFICATIONS **TYPE :** Y2

NO.	ITEM	DESCRIPTIONS
6.	**PACKING**	The capacitors shall be put in poly-bag and packed in box marked with necessary information.

Unit:mm



External packing box



Inside packing box

REMARK : We can offer your specific demand by technology treaty.

7.	**APPLICABLE SPECIFICATIONS**	Unless otherwise specified,test conditions and characteristics shall conform to International Industrial Standards IEC60384-14.

8. CERTAIN HAZARDOUS SUBSTANCES

Testing Item	Standards	Testing Method
Lead/Lead Compounds	800ppm	US EPA3025
Mercury/Mercury Compounds	80ppm	US EPA3025
Cadmium/Cadmium Compounds	800ppm	EN 1122
Hexavalent-Chromium Compounds	800ppm	IEC 111/24CD 62321
PBB&PBDE	800ppm	US EPA3540C
OTHERS	COMPLY WITH ROHS	COMPLY WITH ROHS

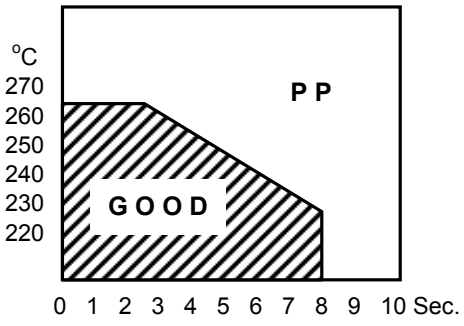
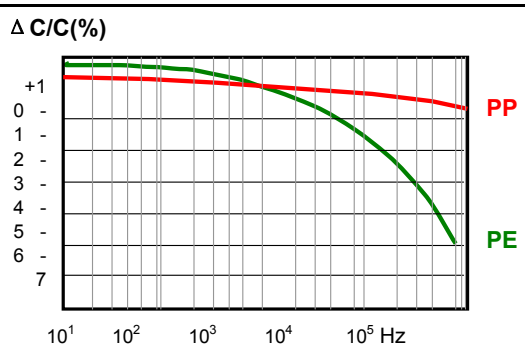
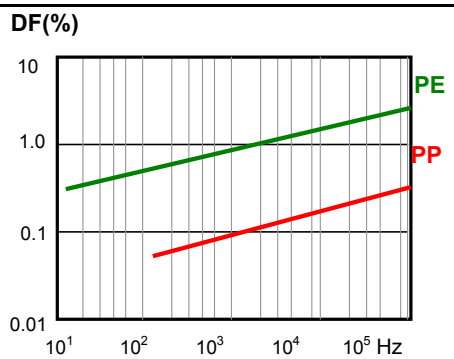
9. ELECTRICAL CHARACTERISTICS

NO.	ITEM		PERFORMANCE	TEST CONDITIONS
9.1.	Withstand Voltage (TV)	Between Terminals	Shall be no breakdown	Apply 400% of rated voltage for 60 sec., or 2000VDC for 1~3 sec. at +20 +/- 5℃. The charging current must be ≤ 1 Amp.
		Between Terminals & Enclosure	Shall be no breakdown	Apply 2500VDC for 60sec. at +20 +/- 5℃.
9.2.	Insulation Resistance (I.R.)		≥15000 MΩ (C ≤ 0.33 uF) ≥ 5000 Ω F (C > 0.33 uF)	Apply Vt ± 15% for 60 ± 5 sec. at 20±5℃ Vt = 100 VDC
9.3.	Capacitance (CAP)		Within the tolerance specified. (at +20 +/- 5℃).	Measuring Frequency : 1 KHz +/- 10%. Measuring Voltage : ≤ 1 Vrms.max.
9.4.	Dissipation Factor (DF)		≤ 0.0010 (0.10%) at 1 KHz.	Measuring Frequency : 1KHz+/- 10% Measuring Voltage : ≤ 1 Vrms.max.

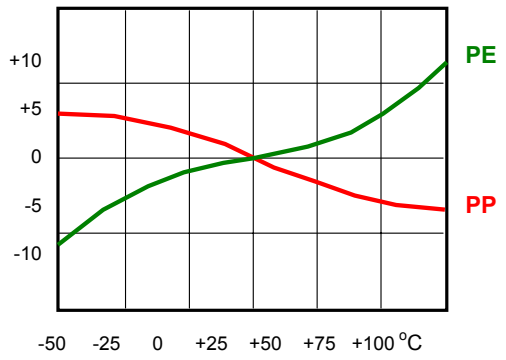
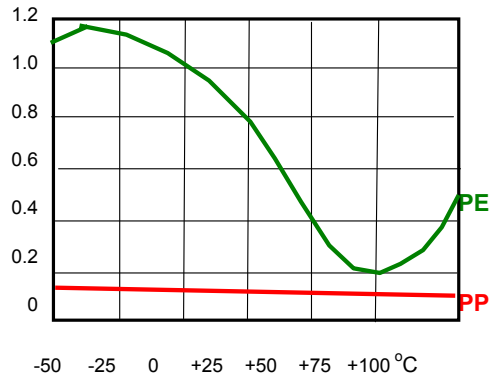
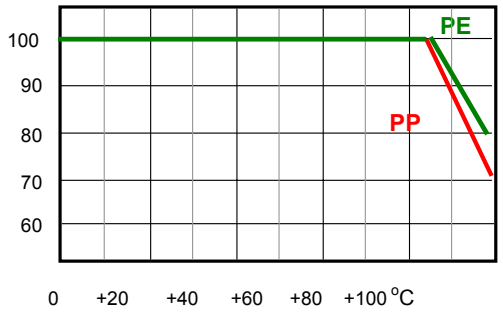
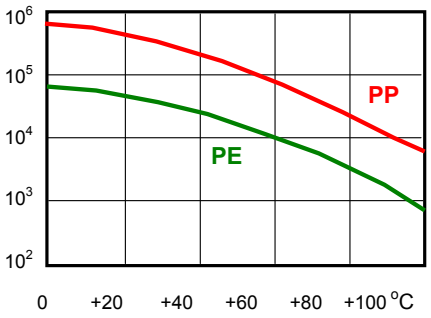
PRODUCT SPECIFICATIONS **TYPE :** Y2

NO.	ITEM		PERFORMANCE	TEST CONDITIONS
10.	**MECHANICAL CHARACTERISTICS**			
NO.	ITEM		PERFORMANCE	TEST CONDITIONS
10.1.	Terminal Strength	Tensil	Shall be no abnormality.	Apply 1.0 kg for 10 +/- 1 sec. to the terminal in the axial direction, and acting in a direction away from the body.
		Bending	Shall be no abnormality.	Apply 0.5 kg for 2 cycles. Each cycle includes: 90° once, return to its initial position for 2-3 sec., and then to the opposite direction once.
10.2.	Vibration resistance		No electrical discontinuity such as opening ,short-circuit of 0.5ms or more. Also,no abnormality on appearance after test.	The freqency shall be varied uniformly from 10Hz to 55Hz at 1.5mm amplitude and back to 10Hz in approximately 1 minute intervals. This test shall be applied 2hours per each direction, total 6 hours.
10.3.	Solderability		At least 90% of the circumferential face of termination up to immersed level shall be covered with new solder.	Soldering temperature : +260 +/- 5℃. Immersion duration : 2 +/- 0.5 sec.
10.4.	Resistance to soldering heat	Appearance	No visible damage.	Soldering Temperature : +260 +/- 5℃. Immersion Duration : 10+/- 1 sec. Immersion Deepth : 4 +/- 0.8 mm from roots. After test, allow it stay alone for 1.5 +/- 0.5 hrs. at standard temperature and humidity before making measurements.
		Dielectric strength (Between terminations)	No breakdown.	
		Capacitance change	Within +/- 3% of the value before test.	
11.	**CLIMATIC TEST**			
NO.	ITEM		PERFORMANCE	TEST CONDITIONS
11.1.	Cold Resistance	Capacitance change	Within +/- 3% of the value before test.	Test Temperature : -40 +/-2 ℃ Test Duration : 2 +/-1 hrs.
11.2.	Dry Heat Resistance	Appearance	Shall be no remarkable change.	Test Temperature : +85 +/- 2℃ Test Duration : 16 +1/-0 hrs. After the test ,apply 400% of rated voltage for 60 sec., or 2000VDC for 1~3 sec. at +20 +/- 5℃. The charging current must be ≤ 1 Amp.
		Withstand Voltage	No breakdown.	
		Capacitance Change Rate (△C/C)	Within +/- 3% of the value before test.	
11.3.	Humidity resistance (steady state)	Appearance	No visible damage.	Test temperature :+40 +/- 2℃ Test humidity : 90% to 95% R.H. Test duration : 500 +24/-0 hrs. After test, allow it stay alone for 2.0+/- 0.5 hrs at standard temperature and humidity beforemaking measurements. After the test ,apply 400% of rated voltage for 60 sec., or 2000VDC for 1~3 sec. at +20 +/- 5℃. The charging current must be ≤ 1 Amp.
		Withstand Voltage	No breakdown.	
		Capacitance Change Rate (△C/C)	Within +/- 5% of the value before test.	
		Dissipation Factor	Tan δ :0.2% max.(1KHz)	
		Insulation Resistance (I.R.)	≥ 50% of the limit value of No. 9.2.	

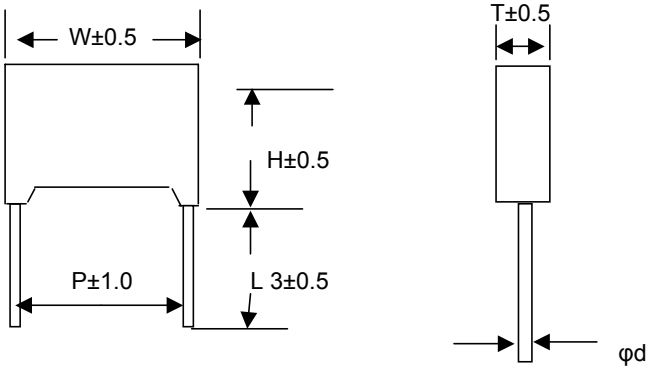
PRODUCT SPECIFICATIONS **TYPE :** Y2

NO.	ITEM		PERFORMANCE	TEST CONDITIONS
11.4.	Damp Heat Loading	Appearance	No visible damage.	Test temperature :+40 +/- 2℃ Test humidity : 90% to 95% R.H. Test voltage : rated voltage. Test duration : 500 +24/-0 hrs. After test, allow it stay alone for 2.0+/- 0.5 hrs at standard temperature and humidity beforemaking measurements. After the test ,apply 400% of rated voltage for 60 sec., or 2000VDC for 1~3 sec. at +20 +/- 5℃. The charging current must be ≤ 1 Amp.
		Withstand Voltage	No breakdown.	
		Capacitance Change Rate (△C/C)	Within +/- 10% of the value before test.	
		Dissipation Factor	Tan δ :0.2% max.(1KHz)	
		Insulation Resistance (I.R.)	≥ 50% of the limit value of No. 9.2.	
11.5.	High Temperature Loading	Appearance	No visible damage.	Test Temperature : +85 +/-2 ℃ . Apply 125% of rated voltage for 500 +24/-0hrs; After test, allow it stay alone for 2.0+/- 0.5 hrs at standard temperature and humidity before making measurements. After the test ,apply 400% of rated voltage for 60 sec., or 2000VDC for 1~3 sec. at +20 +/- 5℃. The charging current must be ≤ 1 Amp.
		Withstand Voltage	No breakdown.	
		Capacitance Change Rate (△C/C)	Within +/- 10% of the value before test.	
		Dissipation Factor	Tan δ :0.2% max.(1KHz)	
		Insulation Resistance (I.R.)	≥ 50% of the limit value of No. 9.2.	
11.6.	Temperature Cycle	Appearance	No visible damage.	Test Temperature Cycle : Total 5 cycles. Each cycle includes : 1. +20 +/- 2℃ for 3 min. 2. -40 +0/-3 ℃ for 30 min. 3. +20 +/- 2℃ for 3 min. 4. +85 +3/-0 ℃ for 30 min. 5. +20 +/- 2℃ for 3 min.
		Insulation Resistance (I.R.)	≥ 50% of the limit value of No. 9.2.	
		Capacitance Change Rate (△C/C)	Within +/- 3% of the value before test.	
		Dissipation Factor	Tan δ :0.2% max.(1KHz)	
12	**REGULATION IN USAGE**			
12.1	Soldering Temperatur e VS Time		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.	
12.2.	Frequency Characteristi cs			

PRODUCT SPECIFICATIONS **TYPE :** Y2

12.3.	Temperature Characteristics[ΔC/C&DF]	**ΔC/C(%) at 1KHz** 	**DF(%) at 1KHz** 
12.4.	Temperature Characteristics[Vn&I.R.]	**Vn(%)** 	**I.R.(MOhm)** 

13. DRAWING OF DIMENSION



14. ACCEPTABLE QUALITY LEVEL (AQL)

NO.	ITEM	AQL	SAMPLING PLAN
14.1.	Appearance AQL	0.65	According to MIL-STD-105E level II. By lot outgoing inspection.
14.2.	Dimension AQL	0.65	
14.3.	Mechanical Characteristics AQL	0.40	
14.4.	Electrical Characteristics AQL		
	CAP, DF,	0.04	
	TV, IR,	Zero Defect	