PRODUCT SPECIFICATIONS

Ropla Elektronik Sp. z o.o.

DESCRIPTIONS	:	**Metallized Polypropylene Film Capacitor(Interference Suppressors Class - X2)**
TYPE	:	**X2-MKP**

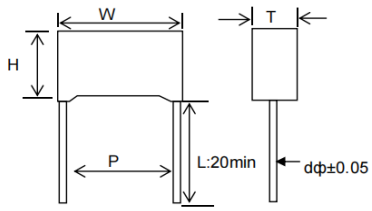


Fig.1

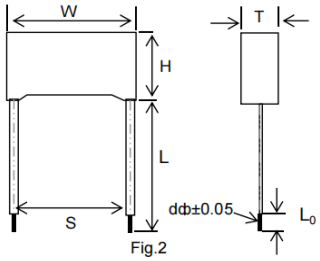


Fig.2

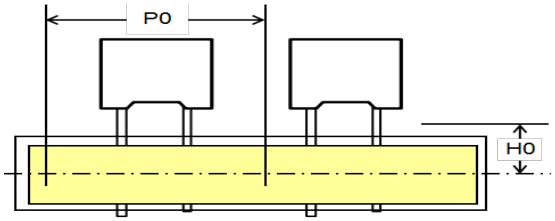


Fig. 3

1. PRODUCT DIMENSIONS : unit : mm

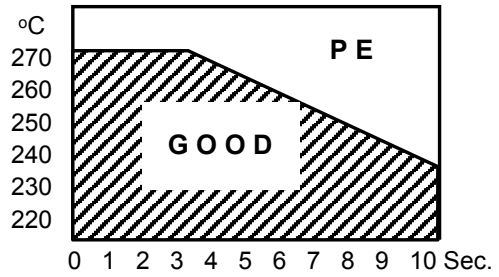
ITEM	CAP	Tol.	R.V.	T.V.	W	H	T	P	P0	S	dΦ	L	L0	Fig.	PART NUMBER
	uF	± (%)	VAC	VDC	±0.5	±0.5	±0.5	±1.0	±0.3	±0.5	±0.05	min	±1		
X2 224K/310VAC	**0.22**	**10**	**310**	**1,333**	**18.0**	**12.0**	**6.0**	**15.0**	**/**	**/**	**0.6**	**19.0**	**/**	**3**	2224K31L15

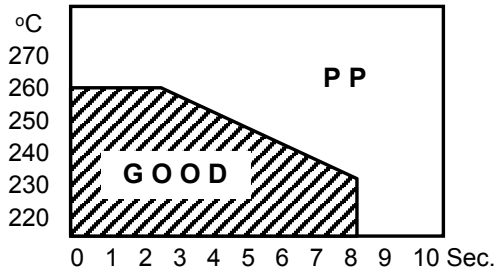
★ Characteristics TYPE :X2-MKP

No.	Test items		Test method	Characteristics
1	Climatic Category		/	40/110/21/B
2	Rated voltage		/	275VAC 310VAC
3	Withstand Voltage(TV)		430% of rated voltage for 60sec.	Shall be no abnormality.
4	Capacitance(CAP)		Measuring Frequency:1KHz±10%. Measuring Voltage :1Vrms.max.	0.001uF — 10uF
5	Tolerance (%)		/	K（±10%）
6	Dissipation Factor(DF)		Measuring Frequency:1KHz±10%. Measuring Voltage :1Vrms.max.	0.0015 (0.15%)max. at 1 KHz.
7	Insulation resistance(IR)		Apply 100V±15%for 60±5sec.at+20 ±2℃ .	≥15,000MΩ(C≤0.33uF) ≥5,000MΩ·uF/C (C＞0.33uF)
8	Terminal Strength	Tensile	Apply 1.0 kg for 10 ± 1sec. to the terminal in the axial direction, and acting in a direction away from the body.	Shall be no abnormality.
9		Bending	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.	Shall be no abnormality.
10	Solderability		Soldering temperature:250 ±3℃ ; Immersion duration：2.0 ±0.5sec	Good Tinning.
11	Soldering Heat Resistance		Soldering Temperature : +260 ± 5℃ . Immersion Duration : 10 ±1sec.	CAP(△C/C) Within ±5% of the value before test. DF 0.002(0.2%) max.at 1Khz
12	Rapid Temperature Change		Test Temperature Cycle : Total 5 cycles. High Temperature : +100±5 ℃ Low Temperature : -40 ±5℃ 30 min ± 10% for each temperature.	Shall be no abnormality. CAP(△C/C) Within ±5% of the value before test. DF 0.002(0.2%) max.at 1Khz
13	Damp Heat Loading		Test temperature :+40 ± 2℃ Test humidity : 90% to 95% R.H. Test voltage : rated voltage. Test duration : 500 +24/-0 hrs.	Shall be no remarkable change. The marking shall be legible. CAP(△C/C) Within ±5% of the value before test. DF 0.002 (0.2%) max.at 1Khz
14	Climatic Sequence	Dry heat	Temperature： 105℃,Duration：16 hrs.	Shall be no abnormality. Shall be no remarkable change. CAP(△C/C) Within ±5% of the value before test. DF 0.002(0.2%) max.at 1Khz
		Humid Cool	—40℃,Duration：2 hrs.	
		Air pressure	Temperature：15℃—35℃,Pressure：8.5KPa； Duration：1 hrs；After experiment, applied votage 1 min.	
		Temperature Cycle	Test Temperature Cycle:Total 5 cycles. Each cycle includes : 1. +20 ±2℃ for 3min. 2. -40 ±3 ℃ for 30 min. 3. +20 ±2℃ for 3min. 4. +100 +3/-0 ℃ for 30 min. 5. +20 ±2℃ for 3 min.	
15	Durability		105℃,Applied 1.25 multiple rate voltage, Duration：1000 hours（41.6 days）	No visible damage and clear mark; CAP(△C/C) Within ±10% of the value before test. DF 0.005 (0.5%) max.at 1Khz IR≥50% of the limit value of No. 7
16	Charge & Discharge		Experiment period :10000 times; Charge duration：0.5s； Discharge duration：0.5s；	CAP(△C/C) Within ±10% of the value before test. DF 0.005 (0.5%) max.at 1Khz IR≥50% of the limit value of No. 7

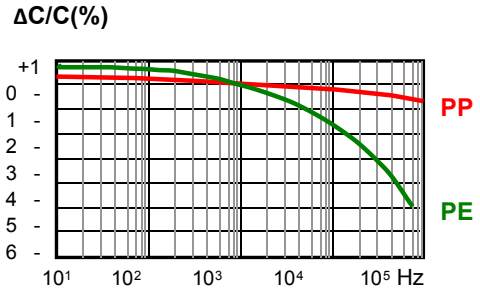
CHARACTERISTICS REFERENCE

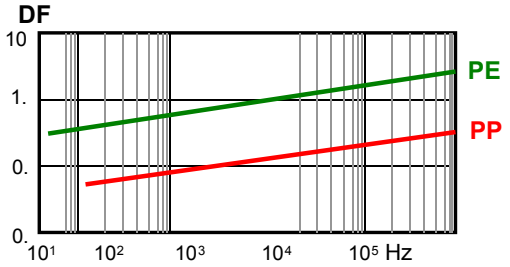
Soldering Temperature VS Time





Frequency Characteristics





Temperature Characteristics