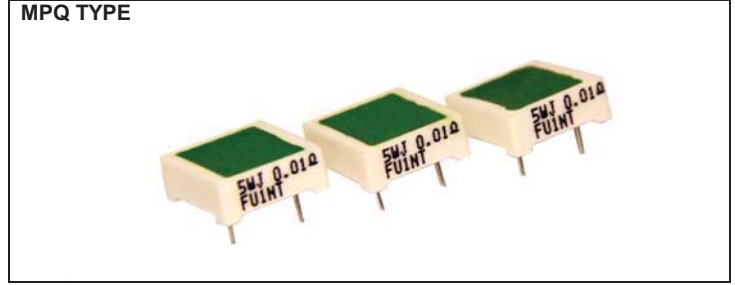
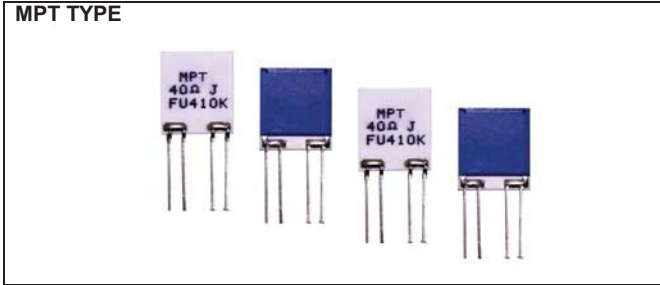


# METAL PLATE CEMENT RESISTOR

**MPT** 金屬板電阻器  
METAL PLATE CEMENT RESISTOR (MPT Type)

**MPQ** 金屬板電阻器  
METAL PLATE CEMENT RESISTOR (MPQ Type)



本體顏色 : Body color  
白色 : White  
塗料顏色 : Coating color  
藍色 : Blue  
標示 : Marking  
文字 : Alphanumeric

本體顏色 : Body color  
白色 : White  
塗料顏色 : Coating color  
綠色 : Green  
標示 : Marking  
文字 : Alphanumeric

## 特性 Feature

- ◎ 不燃與絕緣之安全設計
- ◎ Compact type with safety design of Non-flammability and insulation.
- ◎ 低阻值耐突波佳
- ◎ Low resistance and resilient to surge current.
- ◎ 無電感
- ◎ Non-inductance.
- ◎ 產品符合歐盟 RoHS 要求
- ◎ Products meet EU-RoHS.
- ◎ 可依客戶需求製作
- ◎ Can be produced according to customer's request.

## 外形尺寸 Dimensions

型名 Model	Dimensions mm					Weight (g) (1000pcs)
	A	B	C	h	Ød	
MPT 03	15 ±1.0	13 ±1.0	0.7±0.1	15±3.0	0.5±0.05	630
MPQ 05	16 ±1.0	16 ±1.0	6.0±0.5	4.5±0.5	0.8±0.05	3110

## 料號編碼 Type composition

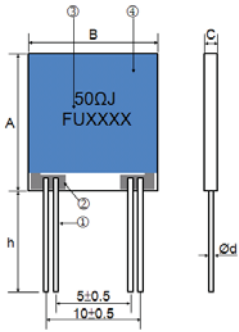
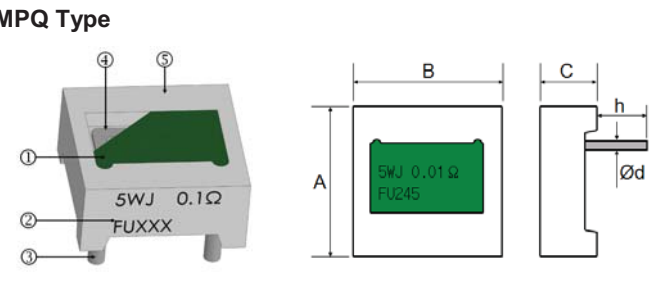
例 Example

MPQ	05	J	R010	S00	CP
型名 Type	額定功率 Rated Power	誤差值 Tolerance	電阻值(Ω) Resistance	二次加工 Forming	端子線 Lead Wire
MPT	03:3W	F±1%	R010=0.01	S000 :	銅線
MPQ	05:5W	G±2%	R100=0.1	Straight	CP Wire
		J±5%	50R0=50		
		K±10%	1000=100		
			1001=1K		
			1002=10K		

## 額定 Ratings

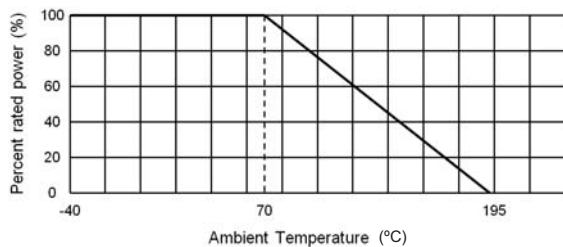
型名 Model	Rated Power (W)	阻值范围 Resistance Range(Ω)	耐电压 Dielectric Withstanding Voltage DC	温度系数 T.C.R.	包装 Plate / Bulk pack(pcs)
		J±5%、K±10%(E24)			
MPT 03	3	36~100M	500V	±350ppm/°C	200
MPQ 05	5	0.01~0.5			

■ 結構圖 Construction

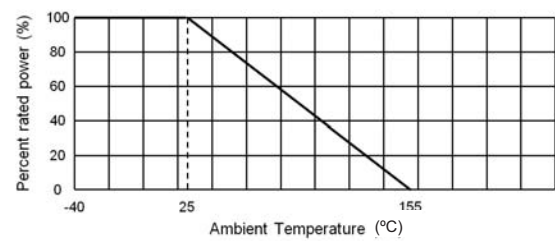
<b>MPT Type</b> 			<b>MPQ Type</b> 								
1	端子線	Lead wire	3	標示	Marking	4	矽水泥	Silicon cement	4	金屬板	Metal board
2	導電層	Print impedance layer	4	陶瓷板	Ceramic base	5	瓷殼	Ceramic case			

■ 額定溫度下降曲線圖 Derating curve

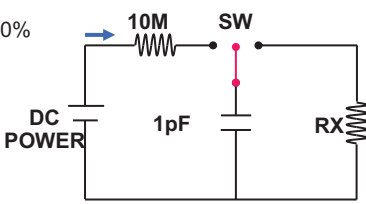
MPT Type



MPQ Type



■ 性能 Performance

試驗項目 Test Items	規格值 Performance Requirements	試驗方法 Test Methods
電阻值 Resistance	規定的誤差值內 Within specified tolerance	測量點從端蓋 10 mm Measuring points are 10 mm from the end cap
溫度係數 T.C.R.	規定值內 Within specified T.C.R.	室溫+100°C Room temperature +100°C
短時間過負荷 Short time overload	±(2%+0.05Ω)	6.25 倍額定功率，5 秒 6.25 times the rated power for 5 seconds
負荷壽命 Load life	±(5%+0.1Ω)	Rated voltage at 70°C for 1,000 hours 1.5hr ON / 0.5hr OFF Cycles
耐濕負荷壽命 Load life in humidity	±(5%+0.1Ω)	10% rate power load 40°C, 95% RH for 1,000 hours; 1.5h ON / 0.5h OFF cycle
耐濕性 Moisture resistance	±(2%+0.05Ω)	40°C, 95% RH, 240 小時 40°C, 95% RH for 240 hours
溫度循環 Temperature cycle	±(1%+0.05Ω)	5 cycles for -25°C (30min); room temp. (30min) ~ +85°C (30min) room temp. (30min)
焊錫耐熱 Resistance to soldering heat	±(2%+0.05Ω)	260°C ± 5°C for 10 seconds (焊錫槽) 350°C ± 10°C for 3.5 seconds (手焊錫)
絕緣電阻 Insulation resistance	>10MΩ	500V 絕緣測試 1 分鐘 500V insulation test 1min.
不燃性 Flameproof	無燃燒現象 No evidence of flaming or arcing	AC voltage of 2,4,8,16,32 times the power rating for 1min. (V ≤ 4 times max. working voltage)
脈衝測試 (MPT Type) Pulse withstanding voltage	± 20% 	The following discharge cycle is repeated in the circuit of the left 2.5 sec. ON 2.5 sec. OFF 10,000 cycles. With following DC pulse test voltage. Pulse voltage: 10 KV