

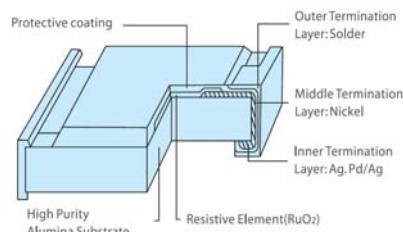
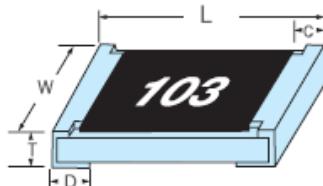


# High Power Thick Film Chip Resistors 高功率厚膜晶片電阻器

## ● 特性 Feature

- 小尺寸、高功率 High power in standard size
- 適用於回流焊和波峰焊 Suitable for reflow & wave soldering
- 高可靠性 Superior reliability

## ● 形狀 & 構造 Figures & Construction



## ● 尺寸 Dimension

Type	HP03 (0603 size)	HP05 (0805 size)	HP06 (1206 size)	HP10 (2010 size)	HP12 (2512 size)
Dimension (mm)	L	1.60 ± 0.10	2.00 ± 0.15	3.10 ± 0.15	5.00 ± 0.10
	W	0.80 <sup>+0.15</sup> <sub>-0.10</sub>	1.25 <sup>+0.15</sup> <sub>-0.10</sub>	1.55 <sup>+0.15</sup> <sub>-0.10</sub>	2.50 <sup>+0.15</sup> <sub>-0.10</sub>
	T	0.45 ± 0.10	0.55 ± 0.10	0.55 ± 0.10	0.55 ± 0.10
	C	0.30 ± 0.20	0.40 ± 0.20	0.45 ± 0.20	0.60 ± 0.25
	D	0.30 ± 0.20	0.40 ± 0.20	0.45 ± 0.20	0.50 ± 0.20

## ● 性能 Specification

Type	HP03 (0603 size)	HP05 (0805 size)	HP06 (1206 size)	HP10 (2010 size)	HP12 (2512 size)
Power rating (70°C)	1/5W	1/3W	1/2W	1W	2W
Max Working Voltage	50V	150V	200V	200V	300V
Max Overload Voltage	100V	300V	400V	400V	600V
Dielectric withstanding Voltage	300V	500V	500V	500V	500V
Resistance Range	1Ω~10MΩ	1Ω~10MΩ	1Ω~10MΩ	1Ω~10MΩ	1Ω~10MΩ
Tolerance			±1%	±5%	
Operating Temperature			-55°C~+155°C		

Note: The High Power Thick Film Chip Resistors 0Ω rated current: 0603  $I_R \leq 2A$ ; 0805、1206  $I_R \leq 4A$ ; 2010、2512  $I_R \leq 6A$

The High Power Thick Film Chip Resistors Low Value can be Production 0.1Ω~1Ω

## ● 性能和測試要求 Specification And Test Methods

Temperature coefficient	1Ω~10Ω $\leq \pm 200\text{PPM}/^\circ\text{C}$	11Ω~10MΩ $\leq \pm 100\text{PPM}/^\circ\text{C}$
Short-time overload	$\pm 5\%: \pm(2.0\% + 0.05\Omega)$ Max.	$\pm 1\%: \pm(1.0\% + 0.05\Omega)$ Max.
Insulation resistance	$\geq 1,000$ Mega Ohm	
Dielectric withstanding voltage	No evidence of flashover, mechanical damage, arcing or insulation breakdown	
Terminal bending	$\pm(1.0\% + 0.05\Omega)$ Max.	
Soldering heat	$\pm(1.0\% + 0.05\Omega)$ Max.	
Solder ability	Min 95% coverage	
Temperature cycling	$\pm 5\%: \pm(1.0\% + 0.05\Omega)$ Max.	$\pm 1\%: \pm(0.5\% + 0.05\Omega)$ Max.
Humidity (Steady State)	$\pm 5\%: \pm(3.0\% + 0.1\Omega)$ Max.	$\pm 1\%: \pm(0.5\% + 0.1\Omega)$ Max.
Load life	$\pm 5\%: \pm(3.0\% + 0.1\Omega)$ Max.	$\pm 1\%: \pm(0.5\% + 0.1\Omega)$ Max.