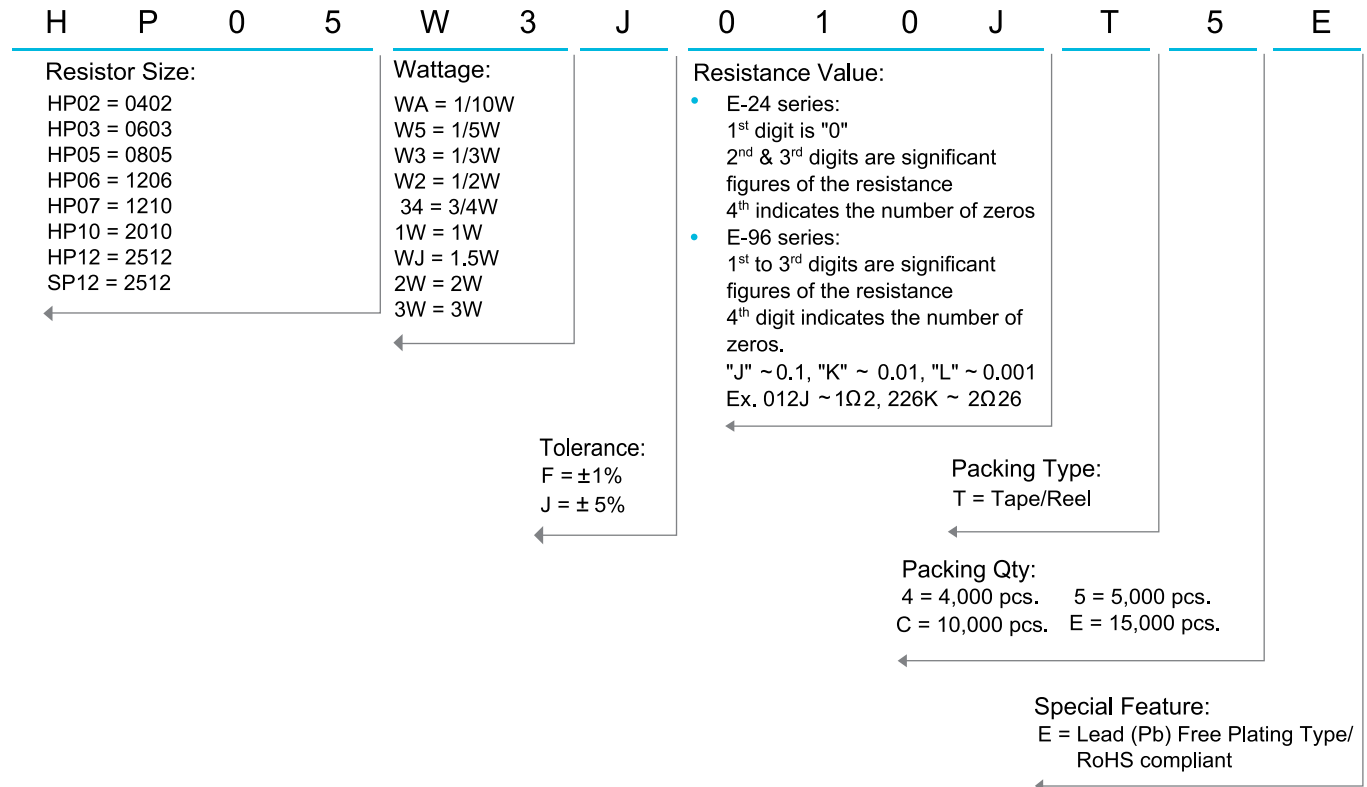


# High Power Thick Film Chip Resistors

## Performance Specification

Temperature Coefficient	HP02 :	1Ω ~ 10Ω	± 400PPM/°C
		10.1Ω ~100 Ω	± 200PPM/°C
		>100Ω	± 100PPM/°C
	HP03~ HP12, SP12 :	1Ω ~ 10Ω	≤± 200PPM/°C
		10.1Ω ~ 10MΩ	≤±100PPM/°C
Short Time Overload	±5%:	±(2.0% + 0.1Ω)Max	
	±1%:	±(1.0% + 0.1Ω)Max	
Terminal Bending	±(1.0% + 0.05Ω)Max		
Soldering Heat	±(1.0% + 0.05Ω)Max		
Solderability	Min. 95% coverage.		
Humidity (Steady State)	±5%:	±(3.0% + 0.1Ω)Max	
	±1%:	±(0.5% + 0.1Ω)Max	
Load Life in Humidity	±5%:	±(3.0% + 0.1Ω)Max	
	±1%:	±(1.0% + 0.1Ω)Max	
Load Life	±5%:	±(3.0% + 0.1Ω)Max	
	±1%:	±(1.0% + 0.1Ω)Max	
Temperature Cycling	±5%:	±(1.0% + 0.05Ω)Max	
	±1%:	±(0.5% + 0.05Ω)Max	
Insulation Resistance	Min. 1,000 Mega Ohm		
Dielectric Withstanding Voltage	No evidence of flashover, mechanical damage, arcing or insulation breakdown.		

## Ordering Procedure: Ex.: HP05, 1/3W, +/-5%, 1Ω T/R-5000

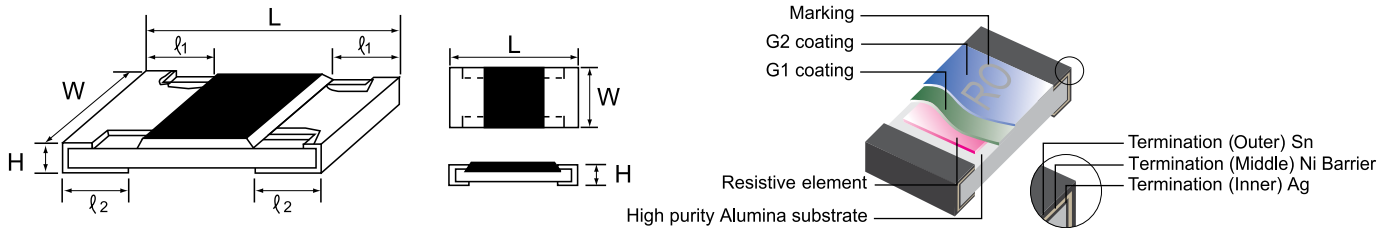


## High Power Thick Film Chip Resistors

### Features

- High power in standard size
- Suitable for both wave and reflow soldering
- Application: AV adapters, LCD back light, Camera strobe

### Dimension



Type	Power Rating at 70°C	Max Working Voltage	Max Overload Voltage	Dielectric Withstanding Voltage	Tol %	Resistance Range	Dimension (mm)				
							L	W	H	l <sub>1</sub>	l <sub>2</sub>
HP02 (0402)	1/10W	50V	100V	100V	±1% ±5%	1Ω ~10MΩ 1Ω ~10MΩ	1.00±0.10	0.50±0.05	0.35±0.05	0.20±0.10	0.25±0.10
HP03 (0603)	1/5W	50V	100V	300V	±1% ±5%	1Ω ~10MΩ 1Ω ~10MΩ	1.60±0.10	0.80 <sup>+0.15</sup> -0.10	0.45±0.10	0.30±0.20	0.30±0.20
HP05 (0805)	1/3W	150V	300V	500V	±1% ±5%	1Ω ~10MΩ 1Ω ~10MΩ	2.00±0.15	1.25 <sup>+0.15</sup> -0.10	0.55±0.10	0.40±0.20	0.40±0.20
HP06 (1206)	1/2W	200V	400V	500V	±1% ±5%	1Ω ~10MΩ 1Ω ~10MΩ	3.10±0.15	1.55 <sup>+0.15</sup> -0.10	0.55±0.10	0.45±0.20	0.45±0.20
HP07 (1210)	3/4W	200V	500V	500V	±1% ±5%	1Ω ~10MΩ 1Ω ~10MΩ	3.10±0.10	2.60 <sup>+0.15</sup> -0.10	0.55±0.10	0.50±0.20	0.50±0.20
HP10 (2010)	1W	200V	500V	500V	±1% ±5%	1Ω ~10MΩ 1Ω ~10MΩ	5.00±0.10	2.50±0.15	0.55±0.10	0.60±0.25	0.50±0.20
HP12 (2512)	2W	250V	500V	500V	±1% ±5%	1Ω ~10MΩ 1Ω ~10MΩ	6.35±0.10	3.20±0.15	0.55±0.10	0.60±0.25	0.50±0.20

**Note:**

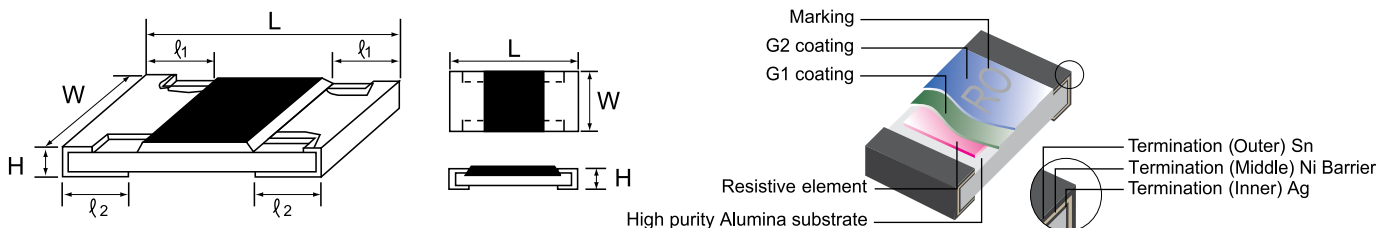
- 1.) Standard Operating Temp (°C): -55 ~+155 2.) Standard : E-96 series : 1% & E-24 series : 5%
- 2.) HP12 1Ω ~ 10MΩ Low TCR available case by case on basis.
- 3.) HP low resistance range : 0.1Ω ~ 1Ω available,  
TCR for HP03, HP05 at +/-200ppm°C, HP06 ~ HP12 at +/-100ppm°C,  
Electrical performance same as above.

## Extra High Power Thick Film Chip Resistors

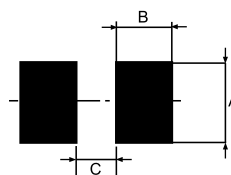
### Features

- High power in standard size
- Suitable for both wave and reflow soldering
- Application: AV adapters, LCD back light, Camera strobe

### Dimension



**Recommended solder pad**



Size	A Width (mm)	B Pad (mm)	C Spacing (mm)
HP12 SP12	3.70	2.80	2.70

**4 layers PCB specification:**

- 1) Outside 2 layers (Top and Bottom) with copper foil thickness at 2oz.
- 2) Inside 2 layers (Middle layers) with copper foil thickness at 4 oz.

Type	Power Rating at 70°C	Max Working Voltage	Max Overload Voltage	Dielectric Withstanding Voltage	Tol %	Resistance Range	Dimension (mm)				
							L	W	H	l <sub>1</sub>	l <sub>2</sub>
SP12 (2512)	3W	250V	500V	500V	±1% ±5%	1Ω~10MΩ 1Ω~10MΩ	6.35±0.10	3.20±0.15	1.10±0.10	0.60±0.25	1.80±0.20



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Thick Film Resistors - SMD category](#):*

*Click to view products by [Royal Ohm manufacturer](#):*

Other Similar products are found below :

[CRCW04028R20JNEE](#) [CRCW06036K80FKEE](#) [CRG1206F1K58](#) [CRL0603-FW-R700ELF](#) [M55342K06B6E19RWL](#) [RC1005F1072CS](#)  
[RC1005F471CS](#) [RC1005F4751CS](#) [RCP0603W100RGED](#) [RCWP72251K47FKWB](#) [RLR05C7501GPB14](#) [RLR07C5111FSBSL](#) [ERJ-](#)  
[1GMF1R00C](#) [ERJ-1GMF1R20C](#) [ERJ-1GMF2R55C](#) [ERJ-1GMF8R66C](#) [25121WF1003T4E](#) [25.501.3653.0](#) [290-1.0M-RC](#) [292-1.0M-RC](#) [292-](#)  
[2.2K-RC](#) [292-4.7K-RC](#) [25121WF4700T4E](#) [292-470K-RC](#) [302-1.0M-RC](#) [CPG1206F10KC](#) [CRCW02011R00FXED](#) [CRCW060315K0FKEE](#)  
[CRCW060320K5FKEE](#) [CRG0201F10K](#) [RCG0402150RFKED](#) [RCG04023K92FKED](#) [RCP2512B100RGWB](#) [RCWP110010R0FKS3](#)  
[RCWP11002K00FKS3](#) [RCWP12061K00FKS2](#) [3520510RJT](#) [352075KJT](#) [M55342K11B9E53RUL](#) [RMC16-102JT](#) [RMC1JPTE](#) [TR0603MR-](#)  
[075K1L](#) [5-2176094-4](#) [35202K7JT](#) [WF06Q1000FTL](#) [ERJ-S03J1R0V](#) [ERJ-S14J4R7U](#) [CHP2512L4R30GNT](#) [CPCC10270R0JE32](#)  
[RCWP11001K00FKS3](#)