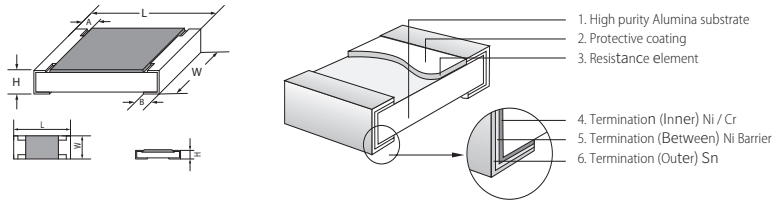


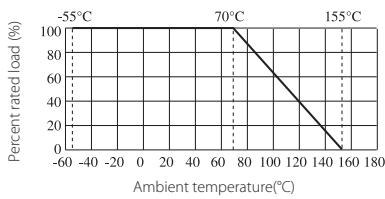
## Feature

- High power in standard size
- Suitable for both wave & re-flow soldering
- Application: AV adapters, LCD back-light, camera strobe etc.

## Figures



## Derating Curve & Specification



Type	L(mm)	W(mm)	H(mm)	A(mm)	B(mm)
HP02 (0402)	1.00±0.10	0.50±0.05	0.35±0.05	0.20±0.10	0.25±0.10
HP03 (0603)	1.60±0.10	0.80±0.10	0.45±0.10	0.30±0.20	0.30±0.20
HP05 (0805)	2.00±0.15	1.25 <sup>+0.15</sup> <sub>-0.10</sub>	0.55±0.10	0.40±0.20	0.40±0.20
HP06 (1206)	3.10±0.15	1.55 <sup>+0.15</sup> <sub>-0.10</sub>	0.55±0.10	0.45±0.20	0.45±0.20
HP07 (1210)	3.10±0.10	2.60±0.20	0.55±0.10	0.50±0.25	0.50±0.20
HP10 (2010)	5.00±0.10	2.50±0.20	0.55±0.10	0.60±0.25	0.50±0.20
HP11 (1812)	4.50±0.20	3.20±0.20	0.55±0.20	0.50±0.20	0.50±0.20
HP12 (2512)	6.35±0.10	3.20±0.20	0.55±0.10	0.60±0.25	0.50±0.20

\*Special offered : HP12 B:1.80±0.25mm

Type	Size	Power Rating at 70°C	Resistance Range of 1% & 5%	Max. Working Voltage	Max. Overload Voltage	Dielectric Withstanding Voltage	Operating Temperature
HP02	0402 (1005)	1/10W	1Ω~10M	50V	100V	100V	-55°C~155°C
			0Ω				
HP03	0603 (1608)	1/5W	0.1Ω~10M	75V	150V	300V	
			0Ω				
HP05	0805 (2012)	1/3W	10mΩ~10M	150V	300V	500V	
			0Ω				
HP06	1206 (3216)	1/2W	10mΩ~10M	200V	400V	500V	
			0Ω				
HP07	1210 (3225)	3/4W	0.1Ω~10M	200V	500V	500V	
			0Ω				Rmax=4mΩ, Imax=12A
HP10	2010 (5025)	1W	10mΩ~10M	200V	500V	500V	
			0Ω				Rmax=5mΩ, Imax=12A
HP11	1812 (4532)	1.25W	0.1Ω~10M	200V	500V	500V	
			0Ω				Rmax=5mΩ, Imax=12A
HP12	2512 (6432)	2W	10mΩ~10M	250V	500V	500V	
			0Ω				Rmax=5mΩ, Imax=16A

## Performance Specifications

<b>Temperature coefficient</b>	HP02: $1\Omega \leq R \leq 10\Omega$ : $\pm 400$ ppm/ $^{\circ}\text{C}$
	$10\Omega < R \leq 100\Omega$ : $\pm 200$ ppm/ $^{\circ}\text{C}$
	$100\Omega < R \leq 10\text{M}$ : $\pm 100$ ppm/ $^{\circ}\text{C}$
	HP03: $0.1\Omega \leq R < 0.2\Omega$ : $\pm 200$ ppm/ $^{\circ}\text{C}$
	$0.2\Omega \leq R \leq 10\text{M}$ : $\pm 100$ ppm/ $^{\circ}\text{C}$
	HP05: $10\text{m}\Omega \leq R \leq 15\text{m}\Omega$ : $\pm 800$ ppm/ $^{\circ}\text{C}$
	$15\text{m}\Omega < R \leq 25\text{m}\Omega$ : $\pm 600$ ppm/ $^{\circ}\text{C}$
	$25\text{m}\Omega < R \leq 50\text{m}\Omega$ : $\pm 400$ ppm/ $^{\circ}\text{C}$
	$50\text{m}\Omega < R < 0.1\Omega$ : $\pm 200$ ppm/ $^{\circ}\text{C}$
	$0.1\Omega \leq R \leq 10\text{M}$ : $\pm 100$ ppm/ $^{\circ}\text{C}$
	HP06: $10\text{m}\Omega \leq R < 15\text{m}\Omega$ : $\pm 700$ ppm/ $^{\circ}\text{C}$
	$15\text{m}\Omega \leq R < 30\text{m}\Omega$ : $\pm 400$ ppm/ $^{\circ}\text{C}$
$30\text{m}\Omega \leq R < 50\text{m}\Omega$ : $\pm 300$ ppm/ $^{\circ}\text{C}$	
$50\text{m}\Omega \leq R < 0.1\Omega$ : $\pm 150$ ppm/ $^{\circ}\text{C}$	
$0.1\Omega \leq R \leq 10\text{M}$ : $\pm 100$ ppm/ $^{\circ}\text{C}$	
HP07, HP11: $\pm 100$ ppm/ $^{\circ}\text{C}$	
HP10: $10\text{m}\Omega \leq R < 15\text{m}\Omega$ : $0 \sim +800$ ppm/ $^{\circ}\text{C}$	
$15\text{m}\Omega \leq R < 50\text{m}\Omega$ : $0 \sim +600$ ppm/ $^{\circ}\text{C}$	
$50\text{m}\Omega \leq R < 10\text{M}$ : $\pm 100$ ppm/ $^{\circ}\text{C}$	
HP12: $10\text{m}\Omega \leq R < 20\text{m}\Omega$ : $0 \sim +800$ ppm/ $^{\circ}\text{C}$	
$20\text{m}\Omega \leq R \leq 50\text{m}\Omega$ : $0 \sim +400$ ppm/ $^{\circ}\text{C}$	
$50\text{m}\Omega < R \leq 10\text{M}$ : $\pm 75$ ppm/ $^{\circ}\text{C}$	

<b>Short-time overload</b>	$\pm 5\%$ : $\pm(2.0\% + 0.1\Omega)$ $\pm 1\%$ : $\pm(1.0\% + 0.1\Omega)$
<b>Dielectric withstanding voltage</b>	No Evidence of flashover, mechanical damage, arcing or insulation breakdown
<b>Terminal bending</b>	$\pm(1.0\% + 0.05\Omega)$
<b>Soldering heat</b>	$\pm(1.0\% + 0.05\Omega)$
<b>Solderability</b>	Coverage must be over 95%.
<b>Rapid change of temperature</b>	$\pm 5\%$ : $\pm(1.0\% + 0.05\Omega)$ $\pm 1\%$ : $\pm(0.5\% + 0.05\Omega)$
<b>Humidity (Steady state)</b>	$\pm 5\%$ : $\pm(3.0\% + 0.1\Omega)$ $\pm 1\%$ : $\pm(0.5\% + 0.1\Omega)$
<b>Load life in humidity</b>	$\pm 5\%$ : $\pm(3.0\% + 0.1\Omega)$ $\pm 1\%$ : $\pm(1.0\% + 0.1\Omega)$
<b>Load life</b>	$\pm 5\%$ : $\pm(3.0\% + 0.1\Omega)$ $\pm 1\%$ : $\pm(1.0\% + 0.1\Omega)$

## Ordering Procedure (Example: High Power HP06 1/2W 5% 120K $\Omega$ T/R-5000)

