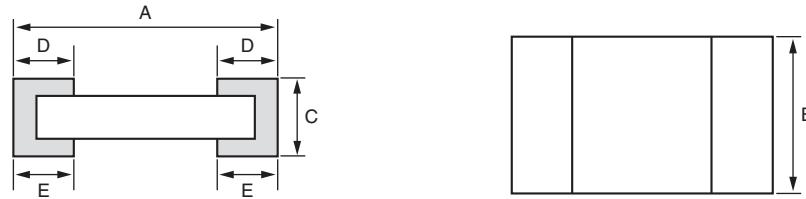
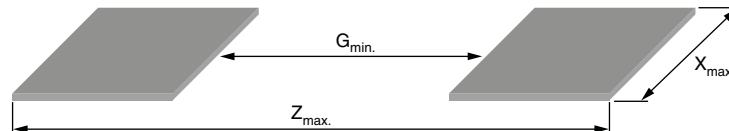


DIMENSIONS in millimeters (inches)


CASE SIZE	A	B	C	D/E	
	MAX. TOL. +0.152 (+0.006)	MAX. TOL. +0.127 (+0.005)		NOMINAL	TOLERANCE
	MIN. TOL. -0.152 (-0.006)	MIN. TOL. -0.127 (-0.005)			
0302	0.75 (0.029)	0.60 (0.024)	0.5 (0.02) ± 0.127 (0.005)	0.15 (0.006)	0.08 (0.003)
0402	1.00 (0.039)	0.60 (0.024)		0.25 (0.010)	0.1 (0.004)
0505	1.27 (0.005)	1.27 (0.050)		0.38 (0.015)	0.13 (0.005)
0603	1.52 (0.060)	0.85 (0.033)		0.40 (0.016)	
0805	1.91 (0.075)	1.27 (0.050)		0.48 (0.019)	
1005	2.54 (0.100)	1.27 (0.050)		0.48 (0.019)	
1206	3.06 (0.120)	1.60 (0.063)			
1505	3.81 (0.150)	1.32 (0.052)			
2010	5.08 (0.200)	2.54 (0.100)			
2512	6.30 (0.248)	3.30 (0.130)			

Note

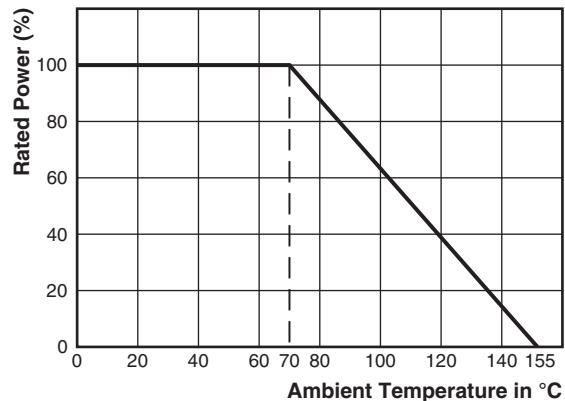
- Case 0805 being same than case 0705, only codification of 0805 remains.

SUGGESTED LAND PATTERN (to IPC-7351A)


CHIP SIZE	DIMENSIONS in millimeters (inches)		
	Z _{max.}	G _{min.}	X _{max.}
0302	1.30 (0.051)	0.15 (0.006)	0.73 (0.029)
0402	1.55 (0.061)	0.15 (0.006)	0.73 (0.029)
0505	1.82 (0.072)	0.10 (0.004)	1.40 (0.055)
0603	2.37 (0.093)	0.35 (0.014)	0.98 (0.039)
0805	2.76 (0.109)	0.74 (0.029)	1.40 (0.055)
1005	3.39 (0.133)	1.37 (0.054)	1.40 (0.055)
1206	3.91 (0.154)	1.85 (0.073)	1.73 (0.068)
1505	4.66 (0.183)	2.44 (0.096)	1.45 (0.057)
2010	5.93 (0.233)	3.71 (0.146)	2.67 (0.105)
2512	7.15 (0.281)	4.93 (0.194)	3.43 (0.135)

TEMPERATURE COEFFICIENT		
TCR	CODE	FILM
$\pm 5 \text{ ppm}/^\circ\text{C}$	C (-55 °C; +155 °C)	NiCr
$\pm 5 \text{ ppm}/^\circ\text{C}$	Z (0 °C; +70 °C)	NiCr
$\pm 10 \text{ ppm}/^\circ\text{C}$	Y	NiCr
$\pm 25 \text{ ppm}/^\circ\text{C}$	E	NiCr
$\pm 50 \text{ ppm}/^\circ\text{C}$	H	NiCr or CrSi
$\pm 100 \text{ ppm}/^\circ\text{C}$	K	NiCr or CrSi

POWER DERATING CURVE



BEST TOLERANCE AND TCR VS. OHMIC VALUE			
STYLE	RANGE (Ω)	TOLERANCE (± %)	TCR CODE
0302	10 to < 100	0.05; 0.1; 0.25; 0.5; 1; 2; 5	C; Z; Y; E; H; K
	100 to 35K	0.01; 0.02; 0.05; 0.1; 0.25; 0.5; 1; 2; 5	C; Z; Y; E; H; K
	> 35K to 50K	0.01; 0.02; 0.05; 0.1; 0.25; 0.5; 1; 2; 5	Z; Y; E; H; K
	> 50K to 75K	0.05; 0.1; 0.25; 0.5; 1; 2; 5	E; H; K
	> 75K to 750K	0.1; 0.25; 0.5; 1; 2; 5 ⁽¹⁾	H; K
0402	10 to < 100	0.05; 0.1; 0.25; 0.5; 1; 2; 5	C; Z; Y; E; H; K
	100 to 67K	0.01; 0.02; 0.05; 0.1; 0.25; 0.5; 1; 2; 5	C; Z; Y; E; H; K
	> 67K to 100K	0.01; 0.02; 0.05; 0.1; 0.25; 0.5; 1; 2; 5	Z; Y; E; H; K
	> 100K to 150K	0.05; 0.1; 0.25; 0.5; 1; 2; 5	E; H; K
	> 150K to 1M5	0.1; 0.25; 0.5; 1; 2; 5 ⁽¹⁾	H; K
0505	10 to < 100	0.05; 0.1; 0.25; 0.5; 1; 2; 5	C; Z; Y; E; H; K
	100 to 187K	0.01; 0.02; 0.05; 0.1; 0.25; 0.5; 1; 2; 5	C; Z; Y; E; H; K
	> 187K to 260K	0.01; 0.02; 0.05; 0.1; 0.25; 0.5; 1; 2; 5	Z; Y; E; H; K
	> 260K to 400K	0.05; 0.1; 0.25; 0.5; 1; 2; 5	E; H; K
	> 400K to 4M	0.1; 0.25; 0.5; 1; 2; 5 ⁽¹⁾	H; K
0603	10 to < 100	0.05; 0.1; 0.25; 0.5; 1; 2; 5	C; Z; Y; E; H; K
	100 to 160K	0.01; 0.02; 0.05; 0.1; 0.25; 0.5; 1; 2; 5	C; Z; Y; E; H; K
	> 160K to 332K	0.01; 0.02; 0.05; 0.1; 0.25; 0.5; 1; 2; 5	Z; Y; E; H; K
	> 332K to 500K	0.05; 0.1; 0.25; 0.5; 1; 2; 5 ⁽¹⁾	E; H; K
	> 500K to 3M2	0.1; 0.25; 0.5; 1; 2; 5	H; K
0805	10 to < 100	0.05; 0.1; 0.25; 0.5; 1; 2; 5	C; Z; Y; E; H; K
	100 to 360K	0.01; 0.02; 0.05; 0.1; 0.25; 0.5; 1; 2; 5	C; Z; Y; E; H; K
	> 360K to 511K	0.01; 0.02; 0.05; 0.1; 0.25; 0.5; 1; 2; 5	Z; Y; E; H; K
	> 511K to 750K	0.05; 0.1; 0.25; 0.5; 1; 2; 5	E; H; K
	> 750K to 10M	0.1; 0.25; 0.5; 1; 2; 5 ⁽¹⁾	H; K

BEST TOLERANCE AND TCR VS. OHMIC VALUE			
STYLE	RANGE (Ω)	TOLERANCE ($\pm \%$)	TCR CODE
1005	10 to < 100	0.05; 0.1; 0.25; 0.5; 1; 2; 5	C; Z; Y; E; H; K
	100 to 400K	0.01; 0.02; 0.05; 0.1; 0.25; 0.5; 1; 2; 5	C; Z; Y; E; H; K
	> 400K to 550K	0.01; 0.02; 0.05; 0.1; 0.25; 0.5; 1; 2; 5	Z; Y; E; H; K
	> 550K to 810K	0.05; 0.1; 0.25; 0.5; 1; 2; 5	E; H; K
	> 810K to 8M1	0.1; 0.25; 0.5; 1; 2; 5 ⁽¹⁾	H; K
1206	10 to < 100	0.05; 0.1; 0.25; 0.5; 1; 2; 5	C; Z; Y; E; H; K
	100 to 1M3	0.01; 0.02; 0.05; 0.1; 0.25; 0.5; 1; 2; 5	C; Z; Y; E; H; K
	> 1M3 to 2M	0.01; 0.02; 0.05; 0.1; 0.25; 0.5; 1; 2; 5	Z; Y; E; H; K
	> 2M to 3M5	0.05; 0.1; 0.25; 0.5; 1; 2; 5	E; H; K
	> 3M5 to 35M	0.1; 0.25; 0.5; 1; 2; 5 ⁽¹⁾	H; K
1505	10 to < 100	0.05; 0.1; 0.25; 0.5; 1; 2; 5	C; Z; Y; E; H; K
	100 to 720K	0.01; 0.02; 0.05; 0.1; 0.25; 0.5; 1; 2; 5	C; Z; Y; E; H; K
	> 720K to 1M	0.01; 0.02; 0.05; 0.1; 0.25; 0.5; 1; 2; 5	Z; Y; E; H; K
	> 1M to 1M5	0.05; 0.1; 0.25; 0.5; 1; 2; 5	E; H; K
	> 1M5 to 15M	0.1; 0.25; 0.5; 1; 2; 5 ⁽¹⁾	H; K
2010	10 to < 100	0.05; 0.1; 0.25; 0.5; 1; 2; 5	C; Z; Y; E; H; K
	100 to 3M8	0.01; 0.02; 0.05; 0.1; 0.25; 0.5; 1; 2; 5	C; Z; Y; E; H; K
	> 3M8 to 5M	0.01; 0.02; 0.05; 0.1; 0.25; 0.5; 1; 2; 5	Z; Y; E; H; K
	> 5M to 7M5	0.05; 0.1; 0.25; 0.5; 1; 2; 5	E; H; K
	> 7M5 to 76M	0.1; 0.25; 0.5; 1; 2; 5 ⁽¹⁾	H; K
2512	10 to < 100	0.05; 0.1; 0.25; 0.5; 1; 2; 5	C; Z; Y; E; H; K
	100 to 7M6	0.01; 0.02; 0.05; 0.1; 0.25; 0.5; 1; 2; 5	C; Z; Y; E; H; K
	> 7M6 to 10M	0.01; 0.02; 0.05; 0.1; 0.25; 0.5; 1; 2; 5	Z; Y; E; H; K
	> 10M to 15M	0.05; 0.1; 0.25; 0.5; 1; 2; 5	E; H; K
	> 15M to 200M	0.1; 0.25; 0.5; 1; 2; 5 ⁽¹⁾	H; K

Note

⁽¹⁾ Tolerance 0.05 % on request.

POPULAR OPTIONS

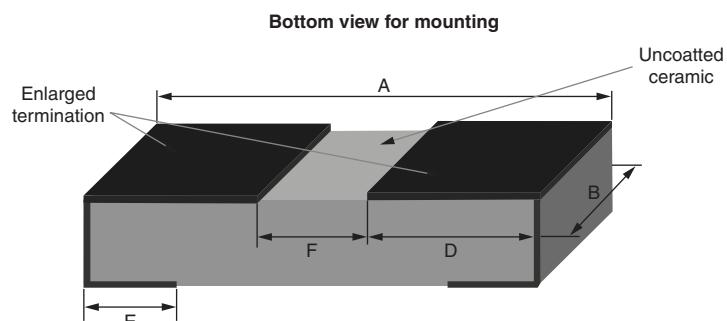
For any option it is recommended to consult Vishay Sfernice for availability first.

Option: Enlarged Terminations

For stringent and special power dissipation requirements, the thermal resistance between the resistive layer and the solder joint can be reduced using enlarged terminations chip resistors which are soldered on large and thick copper pads acting as heatsink (see application note: 53048 Power Dissipation in High Precision Vishay Sfernice Chip Resistors and Arrays (P Thin Film, PRA Arrays, CHP Thick Film) www.vishay.com/doc?53048.

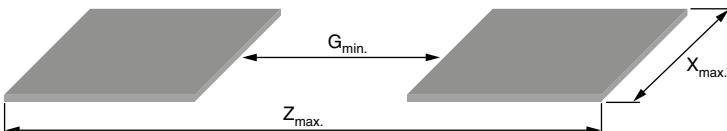
Option to order 0063: (applies to size 1206/1505/2010).

DIMENSIONS (Option 0063) in millimeters

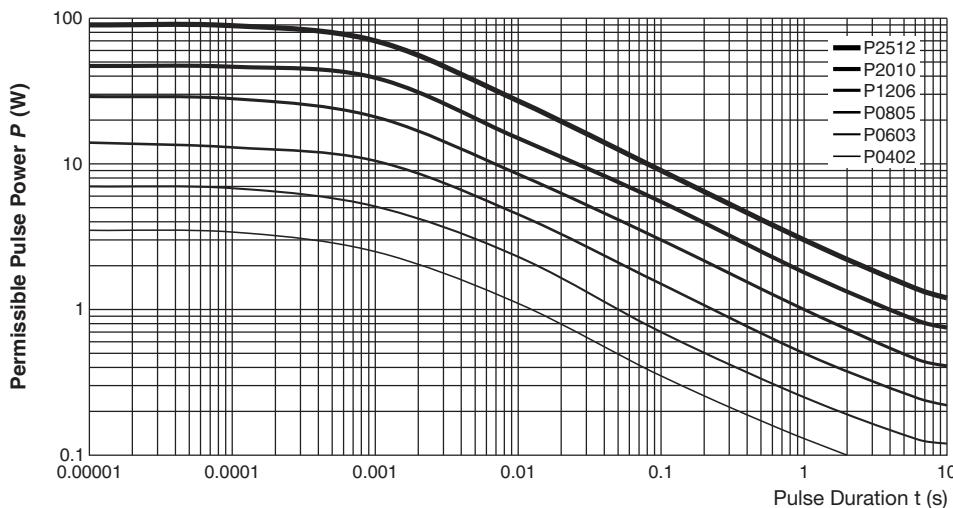
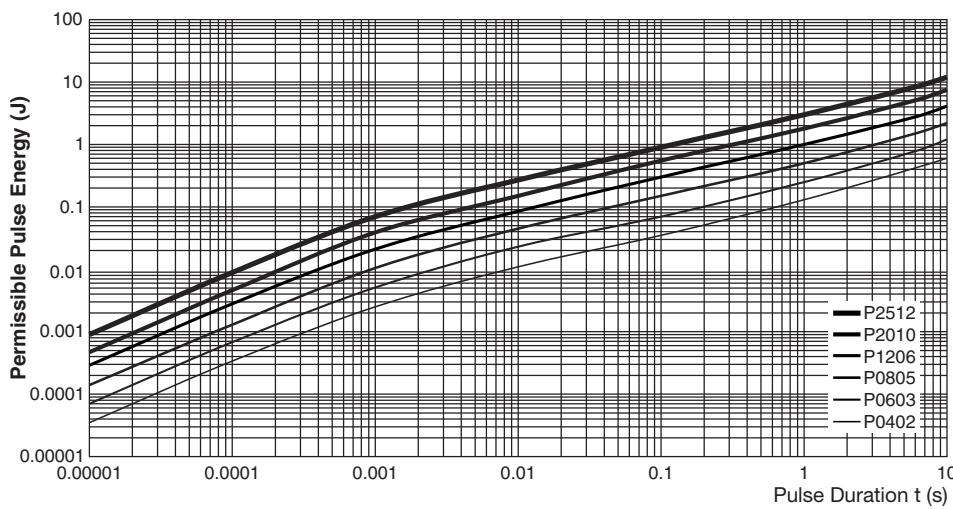
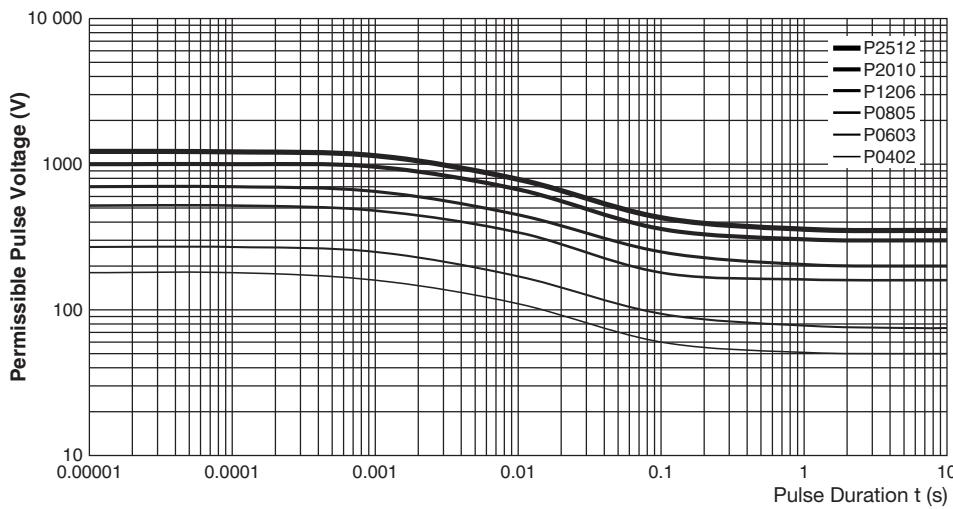


CASE SIZE	A	B	E	D	F		
	MAX. TOL. +0.152	MAX. TOL. +0.127	MAX. TOL. +0.13	MAX. TOL. +0.13			
	NOMINAL	NOMINAL	NOMINAL	NOMINAL	NOMINAL	MIN.	MAX.
1206	3.06	1.60	0.40	1.215			
1505	3.81	1.32		1.59			
2010	5.08	2.54		2.215			
2512	6.30	3.30		2.835			

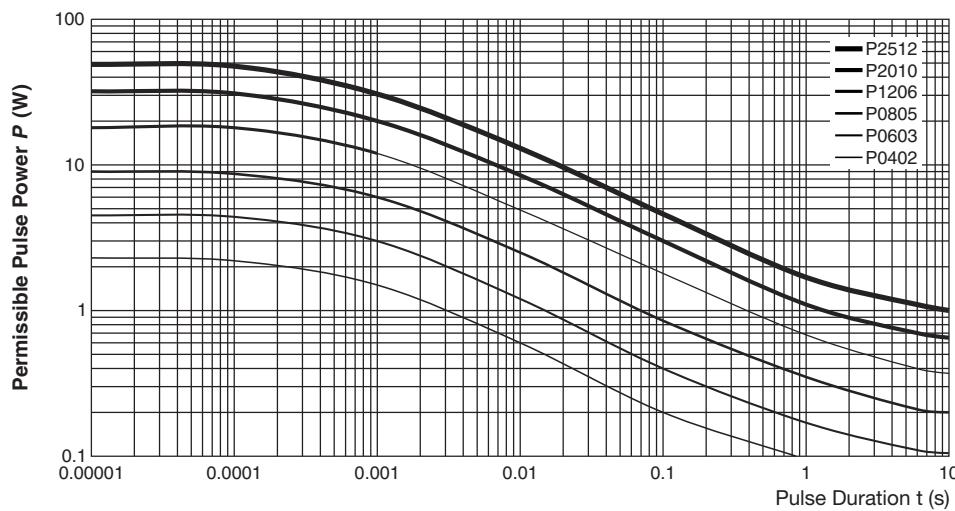
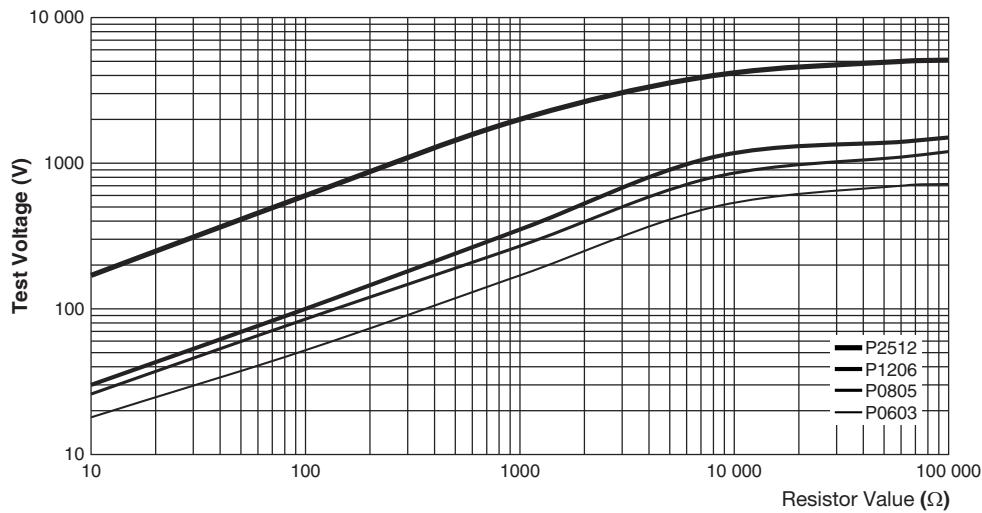
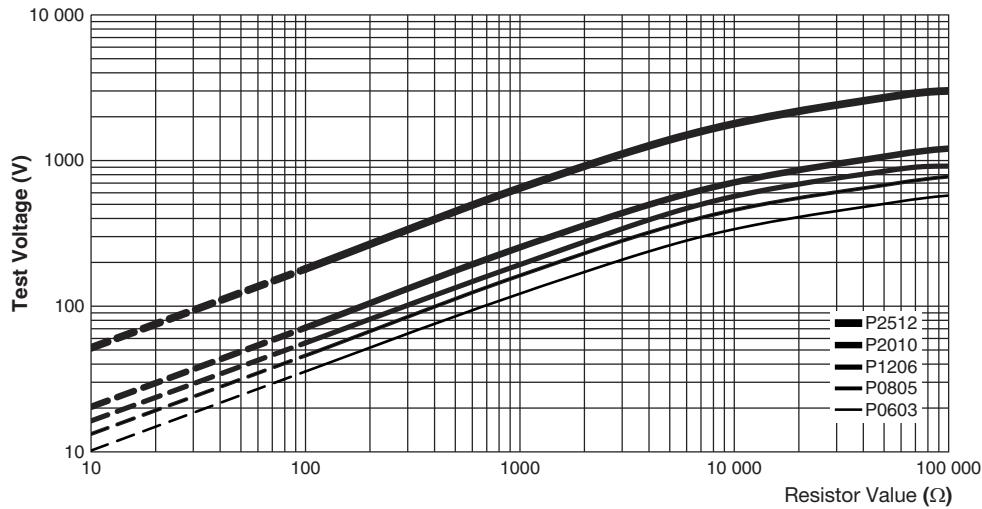
SUGGESTED LAND PATTERN (Option 0063)



CHIP SIZE	DIMENSIONS (IN MILLIMETER)		
	Z _{max.}	G _{min.}	X _{max.}
1206	3.91		1.73
1505	4.66		1.45
2010	5.93		2.67
2512	7.15		3.43

Maximum permissible pulse load P_i max. for single pulse ⁽¹⁾

Energy for single pulse ⁽¹⁾

Maximum permissible pulse voltage U_i max. for single pulse ⁽¹⁾

Note

⁽¹⁾ One should apply the datas mentioned on the 3 curves together to get the right performances.

Maximum permissible pulse load P_i max.

1.2/50 μ s lightning surge

10/700 μ s lightning surge




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[P1206E25R8DBT](#) [P0603E1022BBT](#) [P0603E1182BBT](#) [P0603E1622BBT](#)