

Anti-Surge Thick Film Chip Resistors (Double-sided resistive elements structure) 0805

Type: **ERJ P6W**

■ Features

- ESD surge characteristics superior to standard metal film resistors
- High reliability
Metal glaze thick film resistive element and three layers of electrodes
- Suitable for both reflow and flow soldering
- High power···0.50W:2012(0805) size(ERJP6W)
- High pulse characteristics···1.5 times higher than 0805 inch size Anti-Surge Thick Film Chip Resistors (ERJP06)
- Reference Standards···IEC 60115-8, JIS C 5201-8, EIAJ RC-2134B
- RoHS compliant

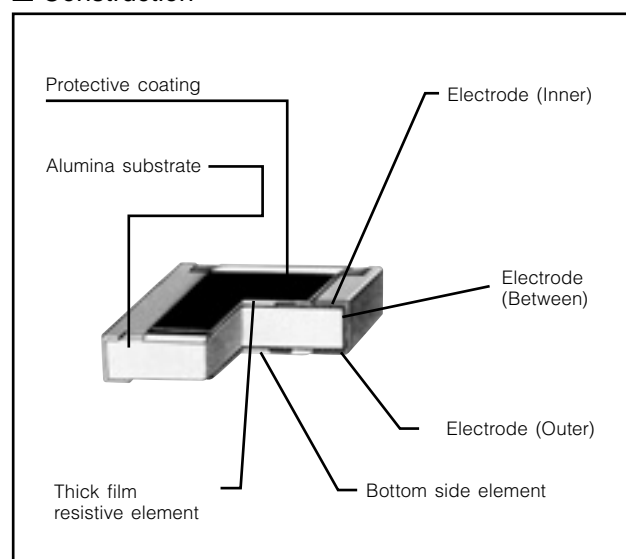
■ Packaging Methods, Land Pattern, Soldering Conditions and Safety Precautions

Please see Data Files

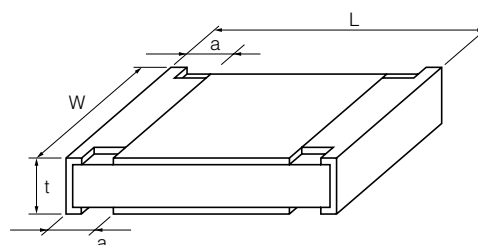
■ Explanation of Part Numbers

1	2	3	4	5	6	7	8	9	10	11	12
E	R	J	P	6	W	F	1	0	0	2	V
Product Code		Size, Power Rating		Resistance Tolerance		Resistance Value				Packaging Methods	
Thick Film Chip Resistors		Type: inch	Power R.	Code	Tolerance	The first two or three digits are significant figures of resistance and the third or 4th one denotes number of zeros following. Three digit type (±5%), four digit type (±1%) Example: 222→2.2 kΩ, 1002→10 kΩ				Code	Packaging
		P6W : 0805	0.50 W	F	± 1 %					V	Punched Carrier Taping 4 mm pitch, 5,000 pcs.
				J	± 5 %						

■ Construction



■ Dimensions in mm (not to scale)



Type (inch size)	Dimensions (mm)				Mass (Weight) [g/1000 pcs.]
	L	W	a	t	
ERJP6W (0805)	2.00±0.20	1.25±0.20	0.35±0.20	0.65±0.10	6

■ Ratings

Type (inch size)	Power Rating ⁽³⁾ at 70 °C (W)	Limiting Element Voltage ⁽¹⁾ (V)	Maximum Overload Voltage ⁽²⁾ (V)	Resistance Tolerance (%)	Resistance Range (Ω)	T.C.R. (×10 ⁻⁶ /°C)	Category Temperature Range (°C)
ERJP6W (0805)	0.50	150	200	±1	10 to 1 M (E24, E96)	±200	-55 to +155
				±5	1 to 1 M (E24)	R < 10 Ω : -100 to +600 10 Ω ≤ R : ±200	

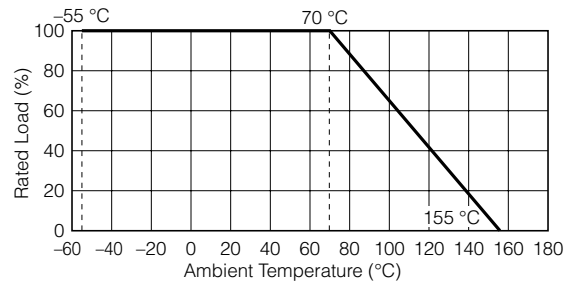
(1) Rated Continuous Working Voltage (RCWV) shall be determined from $RCWV = \sqrt{\text{Power Rating} \times \text{Resistance Values}}$, or Limiting Element Voltage listed above, whichever less.

(2) Overload (Short-time Overload) Test Voltage (SOTV) shall be determined from $SOTV = 2.5 \times \text{Power Rating}$ or max. Overload Voltage listed above whichever less.

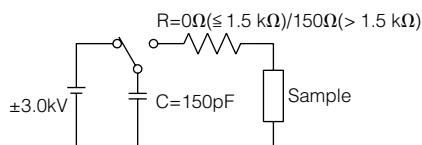
(3) Use it on the condition that the case temperature is below 155 °C.

Power Derating Curve

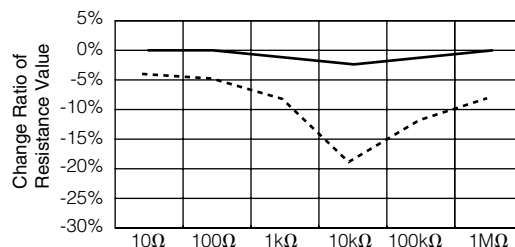
For resistors operated in ambient temperatures above 70 °C, power rating shall be derated in accordance with the figure on the right.



■ ESD Characteristic

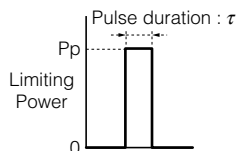


— Anti-Surge Thick Film Chip Resistors(ERJP6W Type)
 - - - Thick Film Chip Resistors(ERJ6G Type)



■ Limiting Power Curve

● In rush pulse Characteristic



Test cycle : 1 cycles

Spec : Resistance value = within ±1%

— Anti-Surge Thick Film Chip Resistors(ERJP6W Type)
 - - - Anti-Surge Thick Film Chip Resistors(ERJP06 Type)

