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

Type: **ERJ P6W**

⚠ This series is not a recommended product.
Not recommended for new design.

■ Features

- ESD surge characteristics superior to standard metal fi lm resistors
- High reliability
  Metal glaze thick fi lm resistive element and three layers of electrodes
- Suitable for both refl ow and fl ow soldering
- High power···0.50 W : 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
Thick Film Chip Resistors

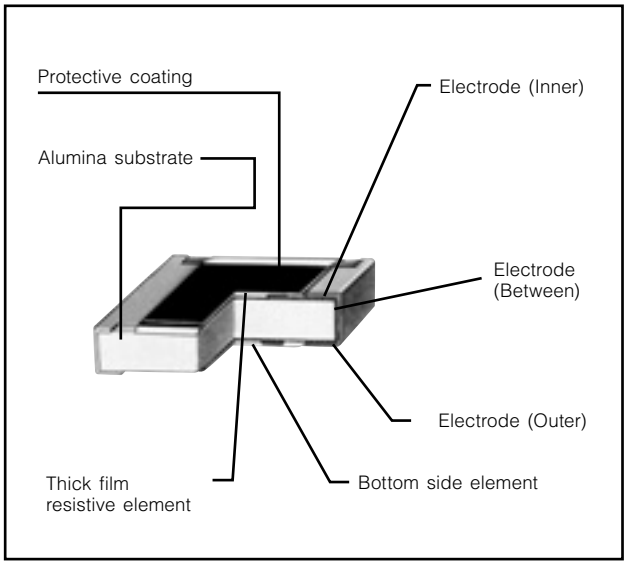
Size, Power Rating	
Type: inch	Power R.
P6W : 0805	0.50 W

Resistance Tolerance	
Code	Tolerance
F	± 1 %
J	± 5 %

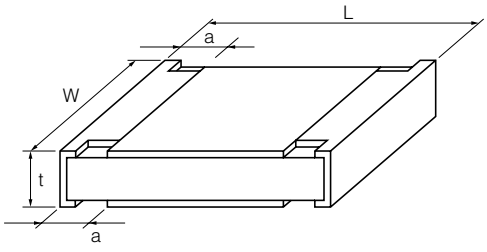
Resistance Value
The first two or three digits are significant figures of resistance and the third or 4th one denotes number of zeros following. Three digit type (±5%), four digit type (±1%) Example: 222→2.2 kΩ, 1002→10 kΩ

Packaging Methods	
Code	Packaging
V	Punched Carrier Taping 4 mm pitch, 5,000 pcs.

■ Construction



■ Dimensions in mm (not to scale)



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

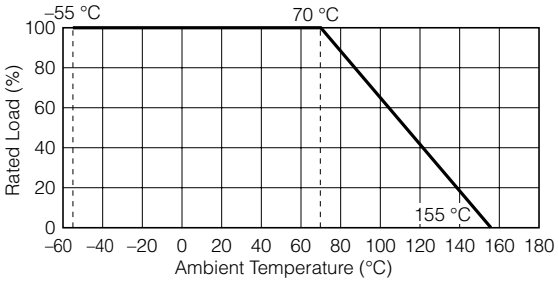
■ Ratings

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	

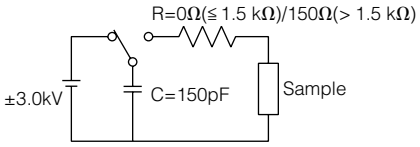
(1) Rated Continuous Working Voltage (RCWV) shall be determined from RCWV=$\sqrt{\text{Power Rating} \times \text{Resistance Values}}$, or Limiting Element Voltage listed above, whichever less.
(2) Overload (Short-time Overload) Test Voltage (SOTV) shall be determined from SOTV=2.5 × Power Rating or max. Overload Voltage listed above whichever less.
(3) Use it on the condition that the case temperature is below 155 °C.

Power Derating Curve

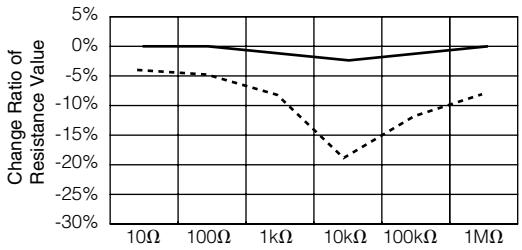
For resistors operated in ambient temperatures above 70 °C, power rating shall be derated in accordance with the figure on the right.



■ ESD Characteristic

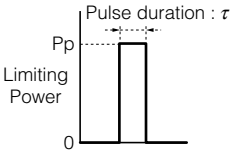


——— Anti-Surge Thick Film Chip Resistors(ERJP6W Type)
- - - - - - - - Thick Film Chip Resistors(ERJ6G Type)



■ 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)