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

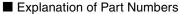
Type: ERJ P6W

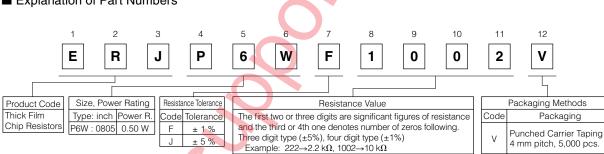
This series is not a recommended product. Not recommended for new design.

#### Features

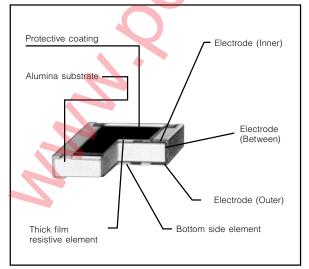
- ESD surge characteristics superior to standard metal fi Im resistors
- High reliability
  - Metal glaze thick fi Im resistive element and three layers of electrodes
- Suitable for both refl ow and fl ow soldering
- High power…0.50W:2012(0805)size(ERJP6W)
- High pulse characteristics · · 1.5 times higher 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

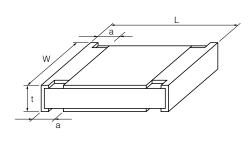




#### ■ Construction



## ■ Dimensions in mm (not to scale)



Type (inch size)		Mass (Weight)			
	L	W	а	t	[g/1000 pcs.]
ERJP6W (0805)	2.00 <sup>±0.20</sup>	1.25 <sup>±0.20</sup>	0.35 <sup>±0.20</sup>	0.65 <sup>±0.10</sup>	6

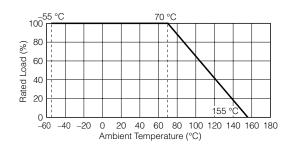
## ■ Ratings

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

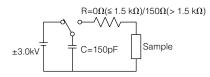
- (1) Rated Continuous Working Voltage (RCWV) shall be determined from RCWV=√Power Rating × Resistance Values, or Limiting Element Voltage listed above, whichever less.
- (2) Overload (Short-time Overload) Test Voltage (SOTV) shall be determined from SOTV=2.5 × Power Rating or max. Overload Voltage listed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

#### Power Derating Curve

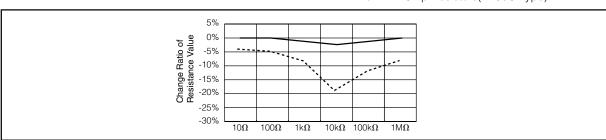
For resistors operated in ambient temperatures above 70  $^{\circ}$ C, power rating shall be derated in accordance with the figure on the right.



#### ■ ESD Characteristic

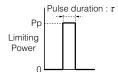


Anti-Surge Thick Film Chip Resistors(ERJP6W Type)Thick Film Chip Resistors(ERJ6G Type)



## ■ 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)

01 Feb. 2014

