

## High Precision Thick Film Chip Resistors



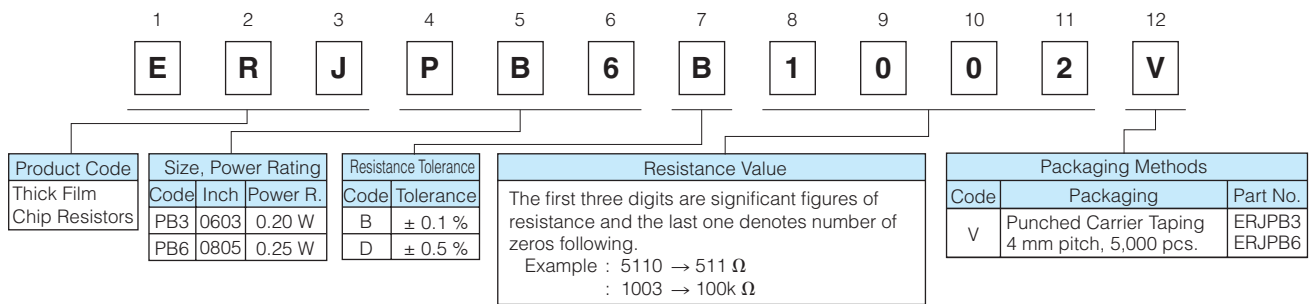
Type: **ERJ PB3, PB6**

### Features

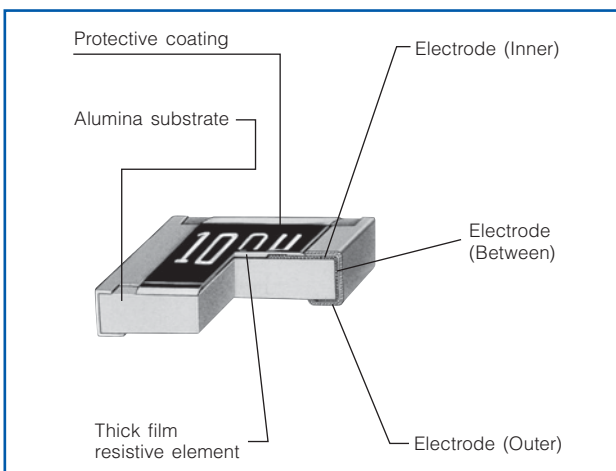
- Achieve the resistance tolerance  $\pm 0.1\%$  with high reliability metal glaze thick film resistor
- Guarantee the temperature coefficient of Resistance  $\pm 50 \times 10^{-6}/^{\circ}\text{C}$  in high resistance range up to  $1\text{M}\ \Omega$
- Suitable for both reflow and flow soldering
- High power ... 0.20 W : 0603 inch / 1608 mm size (ERJPB3)  
0.25 W : 0805 inch / 2012 mm size (ERJPB6)
- Reference Standards... IEC 60115-8, JIS C 5201-8, EIAJ RC-2134B
- AEC-Q200 qualified
- RoHS compliant

■ **As for Packaging Methods, Land Pattern, Soldering Conditions and Safety Precautions,**  
Please see Data Files

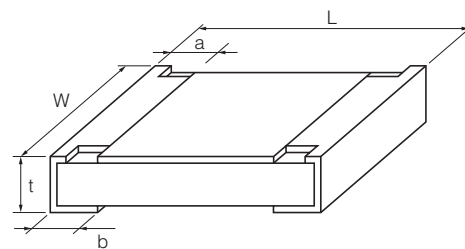
### Explanation of Part Numbers



### Construction



### Dimensions in mm (not to scale)



Part No. (inch size)	Dimensions (mm)					Mass (Weight) [g/1000 pcs.]
	L	W	a	b	t	
ERJPB3 (0603)	1.60 $\pm 0.15$	0.80 $\pm 0.15$ <sub>-0.05</sub>	0.15 $\pm 0.15$ <sub>-0.10</sub>	0.25 $\pm 0.10$	0.45 $\pm 0.10$	2
ERJPB6 (0805)	2.00 $\pm 0.20$	1.25 $\pm 0.10$	0.25 $\pm 0.20$	0.40 $\pm 0.20$	0.60 $\pm 0.10$	4

## Ratings

Part No. (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. ( $\times 10^{-6}/^{\circ}\text{C}$ )	Category Temperature Range (°C)
ERJPB3 (0603)	0.20	150	200	±0.1 ±0.5	200 to 100k (E24, E96)	±50	-55 to +155
ERJPB6 (0805)	0.25	150	200	±0.1 ±0.5	200 to 1M (E24, E96)	±50	-55 to +155

- (1) Rated Continuous Working Voltage (RCWW) shall be determined from  $\text{RCWW} = \sqrt{\text{Power Rating} \times \text{Resistance Values}}$ , or Limiting Element Voltage listed above, whichever less.  
 (2) Overload (Short-time Overload) Test Voltage (SOTV) shall be determined from  $\text{SOTV} = 2.5 \times \text{RCWW}$  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.

