

High Precision Thick Film Chip Resistors



Type: **ERJ PB3, PB6**

Features

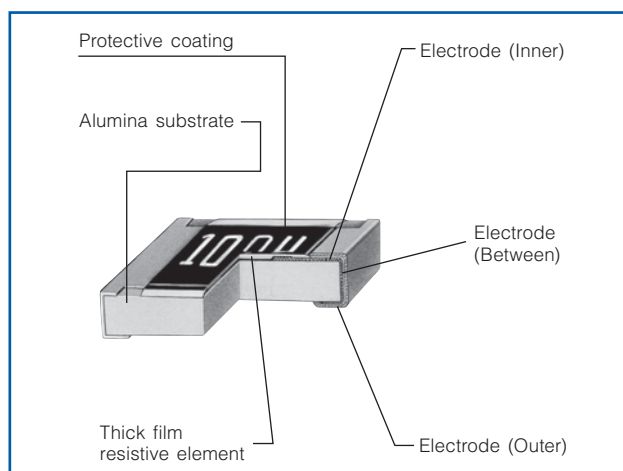
- Achieve the resistance tolerance $\pm 0.1\%$ with high reliability metal glaze thick film resistor
- Guarantee the temperature coefficient of Resistance $\pm 50 \times 10^{-6}/^{\circ}\text{C}$ in high resistance range up to $1\text{M}\Omega$
- Suitable for both reflow and flow soldering
- High power ... 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

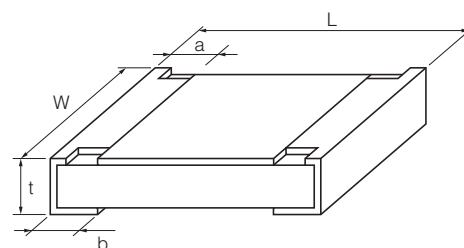
Explanation of Part Numbers

1	2	3	4	5	6	7	8	9	10	11	12	
E	R	J	P	B	6	B	1	0	0	2	V	
Product Code		Size, Power Rating		Resistance Tolerance		Resistance Value			Packaging Methods			
Thick Film Chip Resistors		Code	Inch	Power R.	Code	Tolerance	The first three digits are significant figures of resistance and the last one denotes number of zeros following. Example : 5110 → 511 Ω : 1003 → 100k Ω			Code	Packaging	Part No.
		PB3	0603	0.20 W	B	± 0.1 %				V	Punched Carrier Taping 4 mm pitch, 5,000 pcs.	ERJPB3 ERJPB6
		PB6	0805	0.25 W	D	± 0.5 %						

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 ± 0.15	0.80 ± 0.15 ± 0.05	0.15 ± 0.15 ± 0.10	0.25 ± 0.10	0.45 ± 0.10	2
ERJPB6 (0805)	2.00 ± 0.20	1.25 ± 0.10	0.25 ± 0.20	0.40 ± 0.20	0.60 ± 0.10	4

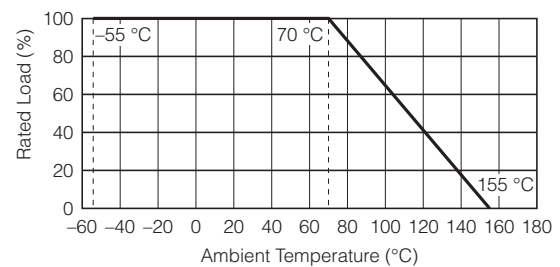
Ratings

Part No. (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. ($\times 10^{-6}/^{\circ}\text{C}$)	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.



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Panasonic:

ERJ-PB3D2400V	ERJ-PB3D2430V	ERJ-PB3D2370V	ERJ-PB6B1303V	ERJ-PB6B1373V	ERJ-PB6B1963V	ERJ-
PB6B4323V	ERJ-PB6B8253V	ERJ-PB6B2203V	ERJ-PB6B3093V	ERJ-PB6B6653V	ERJ-PB6B7153V	ERJ-
PB6B7683V	ERJ-PB6B8063V	ERJ-PB6B5113V	ERJ-PB6B5903V	ERJ-PB6B3242V	ERJ-PB6B3652V	ERJ-
PB6B6192V	ERJ-PB6B7502V	ERJ-PB6B6983V	ERJ-PB6B1183V	ERJ-PB6B1783V	ERJ-PB6B1873V	ERJ-
PB6B2553V	ERJ-PB6B2743V	ERJ-PB6B3602V	ERJ-PB6B6042V	ERJ-PB6B8202V	ERJ-PB6B1743V	ERJ-
PB6B3743V	ERJ-PB6B4423V	ERJ-PB6B5103V	ERJ-PB6B6203V	ERJ-PB6B6803V	ERJ-PB6B1742V	ERJ-
PB6B1912V	ERJ-PB6B2152V	ERJ-PB6B8872V	ERJ-PB6B9532V	ERJ-PB6B1243V	ERJ-PB6B2003V	ERJ-
PB6B2053V	ERJ-PB6B3603V	ERJ-PB6B1212V	ERJ-PB6B3482V	ERJ-PB6B5362V	ERJ-PB6B2742V	ERJ-
PB6B6812V	ERJ-PB6B7682V	ERJ-PB6B1911V	ERJ-PB6B6201V	ERJ-PB6B1402V	ERJ-PB6B1502V	ERJ-
PB6B1692V	ERJ-PB6B2702V	ERJ-PB6B6040V	ERJ-PB6B8870V	ERJ-PB6B1241V	ERJ-PB6B1581V	ERJ-
PB6B4301V	ERJ-PB6B1871V	ERJ-PB6B3161V	ERJ-PB6B3571V	ERJ-PB6B7871V	ERJ-PB6B8201V	ERJ-
PB6B9531V	ERJ-PB6B1822V	ERJ-PB6B6193V	ERJ-PB6B8061V	ERJ-PB6B1131V	ERJ-PB6B1211V	ERJ-
PB6B1271V	ERJ-PB6B1821V	ERJ-PB6B3001V	ERJ-PB6B6811V	ERJ-PB6B2703V	ERJ-PB6B3243V	ERJ-
PB6B4223V	ERJ-PB6B4993V	ERJ-PB6B4751V	ERJ-PB6B6041V	ERJ-PB6B5900V	ERJ-PB6B1301V	ERJ-
PB6B1601V	ERJ-PB6B2701V	ERJ-PB6B3302V	ERJ-PB6B3322V	ERJ-PB6B4702V	ERJ-PB6B6492V	ERJ-
PB6B1653V	ERJ-PB6B4641V	ERJ-PB6B2151V	ERJ-PB6B3091V	ERJ-PB6B1403V	ERJ-PB6B3903V	ERJ-
PB6B4873V	ERJ-PB6B7873V	ERJ-PB6B3000V	ERJ-PB6B4530V			