

High Power Chip Resistors / Wide Terminal Type



Type: **ERJ A1, B1, B2, B3**

Features

- High solder-joint reliability by wide terminal construction
- Excellent heat dissipation characteristics by wide terminal construction
- AEC-Q200 qualified
- RoHS compliant

Recommended Applications

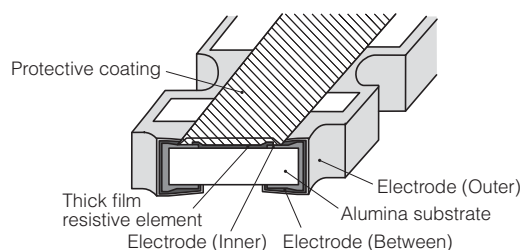
- Automotive electronic circuits including ECUs (Electrical control unit), anti-lock breaking systems and air-bag systems
- Current sensing for power supply circuits in a variety of equipment

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

Explanation of Part Numbers

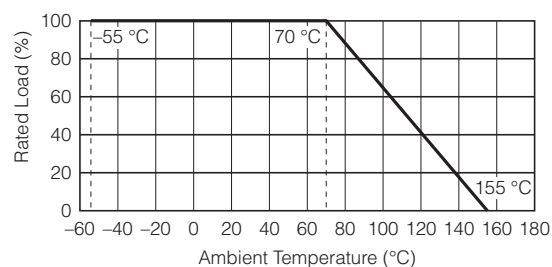
1	2	3	4	5	6	7	8	9	10	11
E	R	J	A	1	A	J	1	0	2	U
Product Code		Size, Power Rating		Resistance Value Region		Resistance Tolerance		Packaging Methods		
Thick Film Chip Resistors		Code	Inch	Power R.	A	10 Ω ≤ R		F	± 1 %	
		A1	1225	1.33 W	B	0.22 Ω ≤ R < 10 Ω		G	± 2 %	
		B1	1020	1 W, 2 W (R ≤ 10 Ω)	C	0.01 Ω ≤ R < 0.22 Ω		J	± 5 %	
		B2	0612	0.75 W, 1 W (R ≤ 10 Ω)	D	0.005 Ω ≤ R < 0.01 Ω				
		B3	0508	0.33 W, 0.5 W (R ≤ 1 Ω)	Resistance Value					
		Shown by 3 digits or letters. Only when it is impossible, shown by 4 digits or letters. (Ex.) 102 : 1.0 kΩ R01 : 0.01 Ω = 10 mΩ 4R7 : 4.7 Ω R015 : 0.015 Ω = 15 mΩ								

Construction (Example : ERJA1 type)



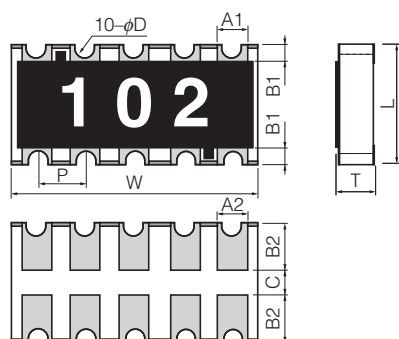
Power Derating Curve

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



Dimensions in mm (not to scale)

ERJA1 type

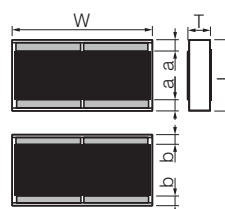


Mass (Weight) [1000 pcs.] : 40 g

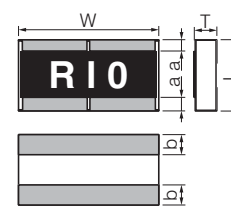
Dimensions (mm)	L	W	T	A ₁	B ₁
	3.20±0.20	6.40±0.20	0.55±0.10	0.70±0.20	0.45±0.20
Dimensions (mm)	A ₂	B ₂	P	φD	C
	0.70±0.20	1.25±0.15	1.27±0.10	0.30 ^{+0.10} _{-0.20}	0.4 min.

ERJB2 type

(R < 10 mΩ)



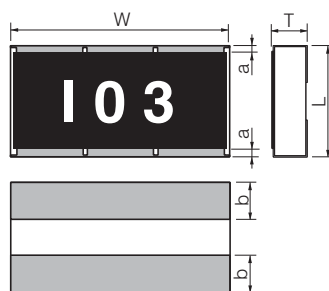
(10 mΩ ≤ R ≤ 1 MΩ)



Mass (Weight) [1000 pcs.] : 11 g

Dimensions (mm)	L	W	T	a	b
5 mΩ ≤ R < 10 mΩ	1.60±0.15	3.20±0.20	0.65±0.15	0.30±0.20	0.30±0.20
10 mΩ ≤ R < 220 mΩ			0.55±0.15	0.25±0.20	0.50±0.20
220 mΩ ≤ R ≤ 1 MΩ					

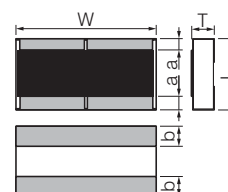
ERJB1 type



Mass (Weight) [1000 pcs.] : 27 g

Dimensions (mm)	L	W	T	a	b
	2.50±0.20	5.00±0.20	0.55±0.20	0.25±0.20	0.90±0.20

ERJB3 type

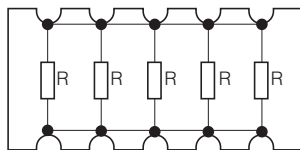


Mass (Weight) [1000 pcs.] : 4.8 g

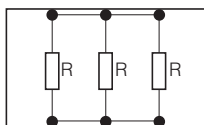
Dimensions (mm)	L	W	T	a	b
	1.25±0.10	2.00±0.15	0.50±0.10	0.25±0.20	0.40±0.20

Circuit Configuration

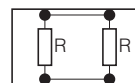
ERJA1 type



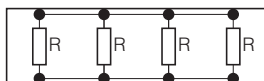
ERJB1 type



ERJB3 type

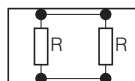


< Less than 10 mΩ >



ERJB2 type

< Low resistance zone >



< High resistance zone >

