Anti-Sulfurated High Power Chip Resistors / Wide Terminal Type

Type: **ERJ C1**

Features

- High resistance to sulfurization achieved by adopting Anti-Sulfurated electrode structure and material
- High solder-joint reliability by wide terminal construction
- Excellent heat dissipation characteristics by wide terminal construction
- AEC-Q200 qualified
- RoHS compliant

Recommended Applications

- Motor control circuit of the industrial equipment
- 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	C	1	C	F	R	1	0	U

Product Code

Thick Film Chip Resistors

Size, Power Rating

Code	Inch	Power R.
C1	1020	2 W

Resistance Value Region

B	220 mΩ ≦ R ≦ 1 Ω
C	10 mΩ ≦ R < 220 mΩ

Resistance Tolerance

F	± 1 %
J	± 5 %

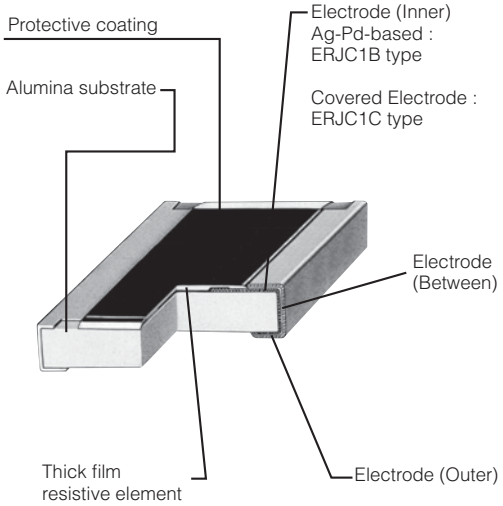
Packaging Methods

Code	Packaging	Part No.
U	Embossed Carrier Taping 4 mm pitch, 5,000 pcs.	ERJC1

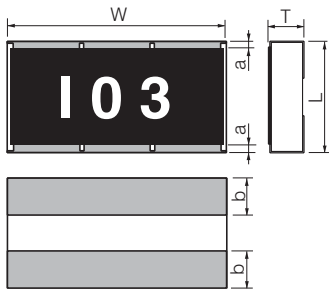
Resistance Value

Shown by 3 digits or letters. Only when it is impossible, shown by 4 digits or letters.
(ex.) R01 : 0.01 Ω = 10 mΩ R015 : 0.015 Ω = 15 mΩ

Construction



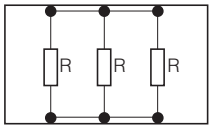
Dimensions in mm (not to scale)



Part No. (inch size)	Dimensions (mm)					Mass (Weight) [g/1000 pcs.]
	L	W	T	a	b	
ERJC1B (1020)	2.50±0.20	5.00±0.20	0.55±0.20	0.35±0.20	0.90±0.20	27
ERJC1C (1020)				0.60±0.20		

Circuit Configuration

Type ERJC1



Ratings

Part No. (inch size)	Power Rating at 70 °C (1) (W)	Resistance Tolerance (%)	Resistance Range (Ω)	T.C.R. (×10^{-6}/°C)	Category Temperature Range (°C)
ERJC1 (1020)	2	±1	10 m to 1 (E24)	10 mΩ ≦ R < 22 mΩ : ±350 22 mΩ ≦ R < 47 mΩ : ±200 47 mΩ ≦ R < 100 mΩ : ±150 100 mΩ ≦ R ≦ 1 Ω : ±100	–55 to +155
		±5		10 mΩ ≦ R < 22 mΩ : ±350 22 mΩ ≦ R < 1 Ω : ±200	

(1) 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.