

Low Resistance Value Chip Resistors(Current Sensing Resistors) 0603, 2512

Type: **ERJM03**

ERJM1W



■ Features

- Low resistance values and high precision(1 mΩ to 20 mΩ)
- Stable resistance not influenced by measurement position
- High heat emission
- Low profile, strong body
- Inductance less than 1.0 nH for the metal plate structure

RoHS compliant

■ Packaging Methods

Please see Pages 40 to 43

■ Recommended Land Pattern

Please see Pages 44 to 45

■ Recommended Soldering Conditions

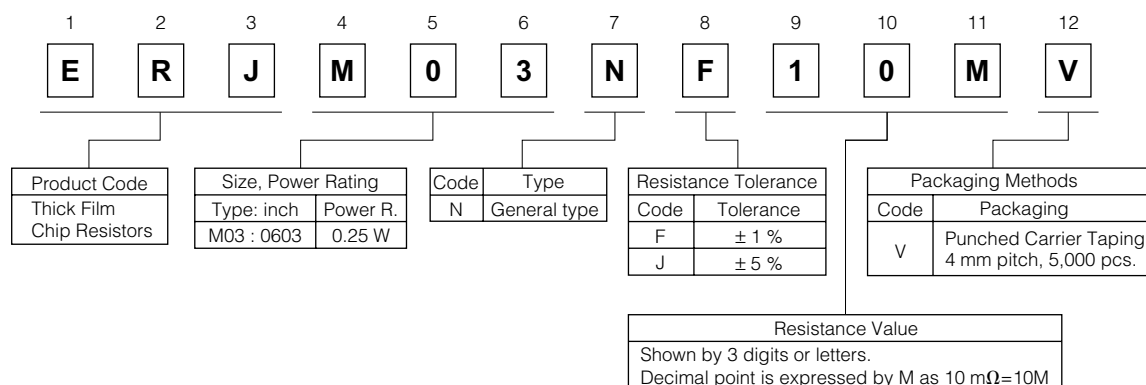
Please see Page 46

■ Safety Precautions

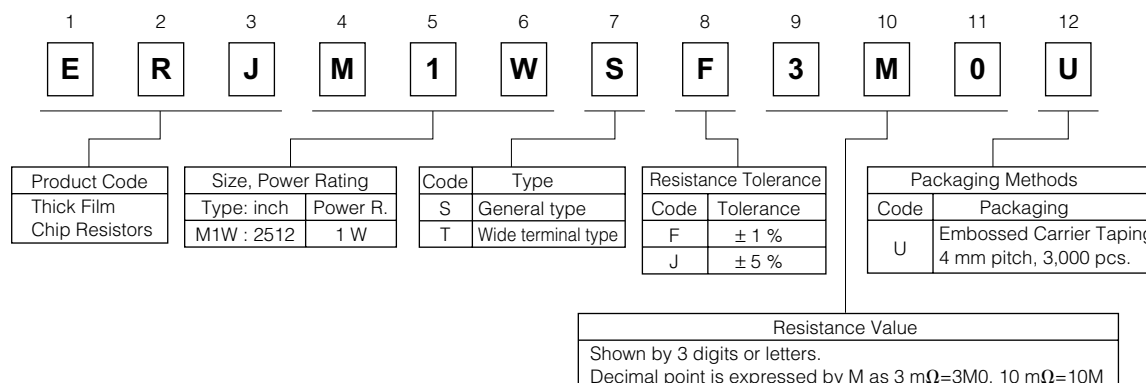
Please see Page 47

■ Explanation of Part Numbers

● ERJM03

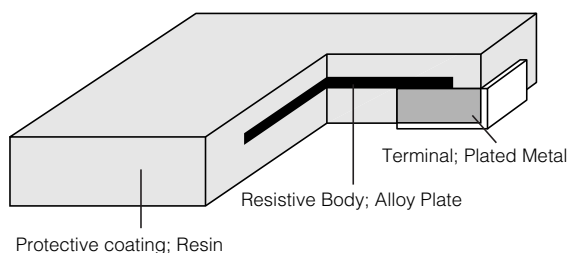


● ERJM1W

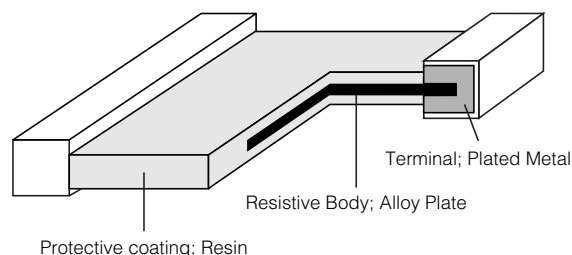


Construction

ERJM03

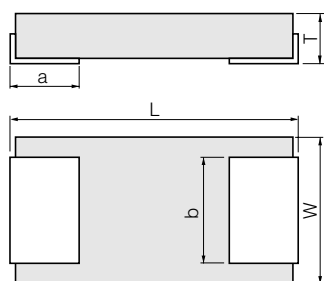


ERJM1W



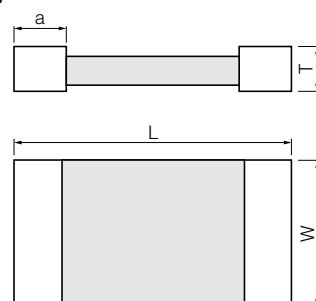
Dimensions in mm (not to scale)

ERJM03



Type (inch size)	Dimensions (mm)					Mass (Weight) [g/1000 pcs.]
	L	W	T	a	b	
ERJM03N (0603)	1.60 \pm 0.15	0.8 \pm 0.15	0.35 \pm 0.10	0.45 \pm 0.15	0.65 \pm 0.15	1.7

ERJM1W



Type	Type (inch size)	Dimensions (mm)				Mass (Weight) [g/1000 pcs.]
		L	W	T	a	
S Type	ERJM1WS (2512)	6.40 \pm 0.25	3.20 \pm 0.25	0.80 \pm 0.30	1.00 \pm 0.25	70
T Type	ERJM1WT (2512)	6.40 \pm 0.40			2.10 \pm 0.30	90

Ratings

Type (inch size)	Power Rating at 70 °C (W)	Standard Resistance (m Ω)	Resistance Tolerance (%)	T.C.R. ($\times 10^{-6}/^{\circ}\text{C}$)	Category Temperature Range (°C)	Circuit board of use
ERJM03N (0603)	0.25	10	F: ± 1 , J: ± 5	± 100	-55 to +155	—
ERJM1WS (2512)	1	3, 4		± 350	-55 to +170	You should use the aluminum substrate when the added wattage exceeds 0.5 W.
		5, 6, 10, 15, 20		± 100		
ERJM1WT (2512)		1, 1.5		350 \pm 100		
		2, 3, 4		100 \pm 50		

* Please contact the factory for other values and the range

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.

