Current Sensing Resistors, Metal Plate Type

Type: **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

■ As for Packaging Methods, 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	M	1	W	S	F	3	M	0	U

Product Code

Thick Film Chip Resistors

Size, Power Rating

Code	Inch	Power R.
M1W	2512	1 W

Code / Type

Code	Type
S	General type
T	Wide terminal type

Resistance Tolerance

Code	Tolerance
F	± 1 %
J	± 5 %

Packaging Methods

Code	Packaging
U	Embossed Carrier Taping 4 mm pitch, 3,000 pcs.

Resistance Value

Shown by 3 digits or letters.
Decimal point is expressed by M as 3 mΩ=3M0, 10 mΩ=10M

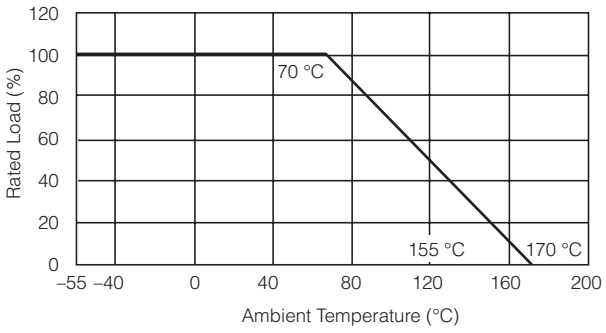
Ratings

Part No. (inch size)	Power Rating at 70 °C (W)	Standard Resistance (mΩ)	Resistance Tolerance (%)	T.C.R. ($\times 10^{-6}$/°C)	Category Temperature Range (°C)	Circuit board of use
ERJM1WS (2512)	1	3, 4	F: ±1, J: ±5	±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±100		
		2, 3, 4		100±50		

✻ Please contact the factory for other values and the range

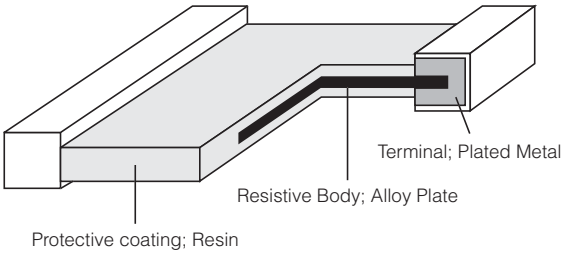
Power Derating Curve

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

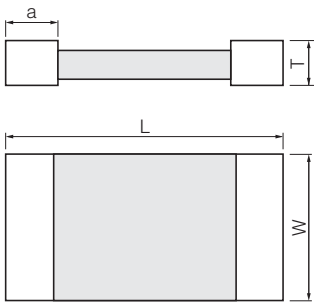


Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use.
Should a safety concern arise regarding this product, please be sure to contact us immediately.

Construction



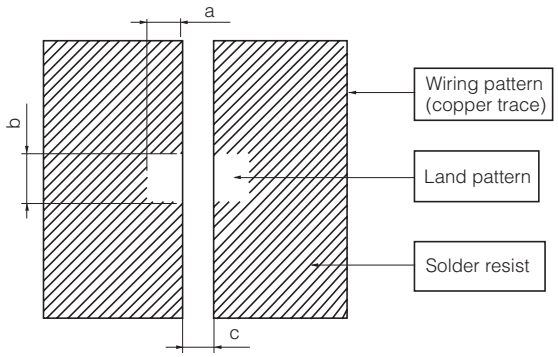
Dimensions in mm (not to scale)



Type	Part No. (inch size)	Dimensions (mm)				
		L	W	T	a	Mass (Weight) [g/1000 pcs.]
S Type	ERJM1WS (2512)	$6.40^{\pm0.25}$	$3.20^{\pm0.25}$	$0.80^{\pm0.30}$	$1.00^{\pm0.25}$	70
T Type	ERJM1WT (2512)	$6.40^{\pm0.40}$			$2.10^{\pm0.30}$	90

Recommended Land Pattern

● An example of a land pattern



Part No.	Dimensions (mm)		
	a	b	c
ERJM1WS	2.1	3.4	4.2
ERJM1WT	3.1	3.4	2.2

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