

Current Sensing Resistors, Metal Plate Type

Type: **ERJM1W**



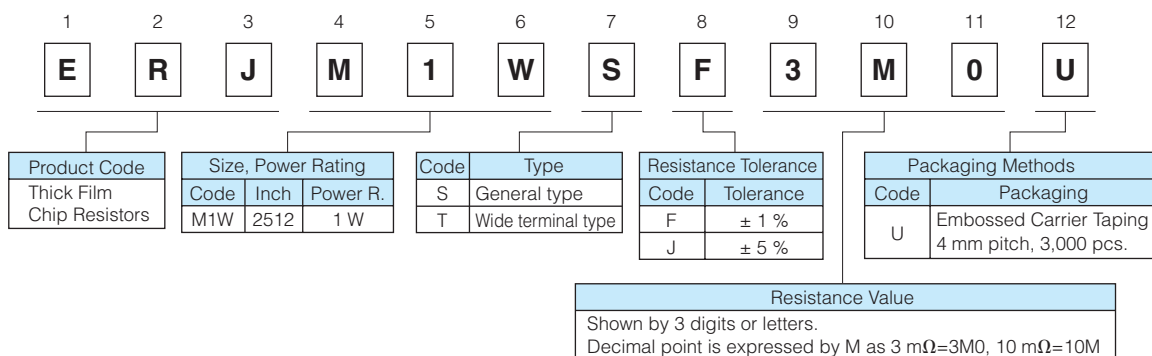
Features

- 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



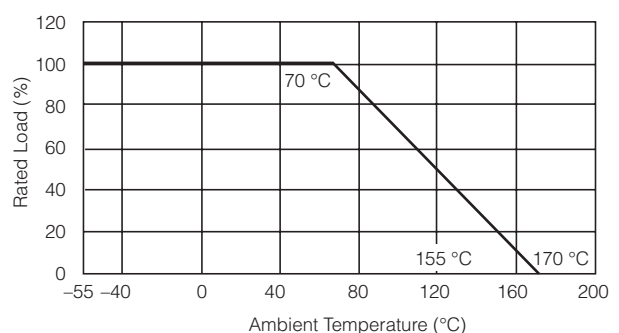
Ratings

| Part No. (inch size) | Power Rating at 70 °C (W) | Standard Resistance (mΩ) | Resistance Tolerance (%) | T.C.R. (×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 | | |

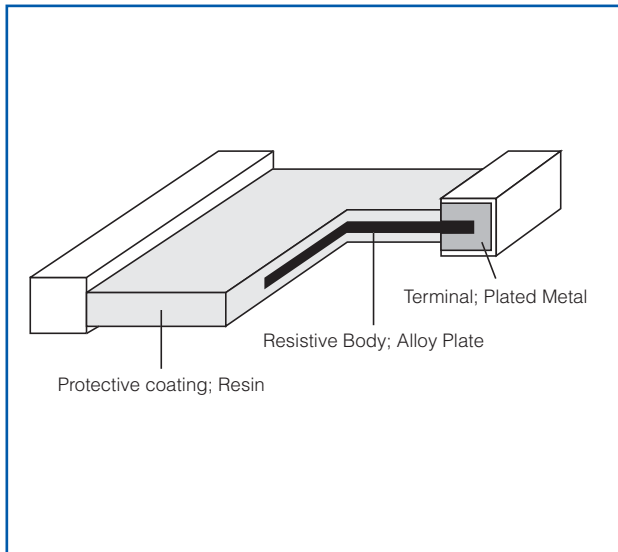
* Please contact the factory for other values and the range

Power Derating Curve

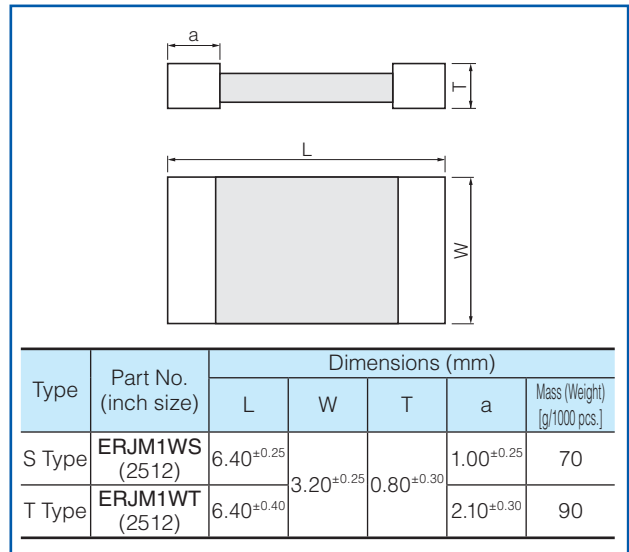
For resistors operated in ambient temperatures above 70 °C, power rating shall be derated in accordance with the figure on the right.



Construction

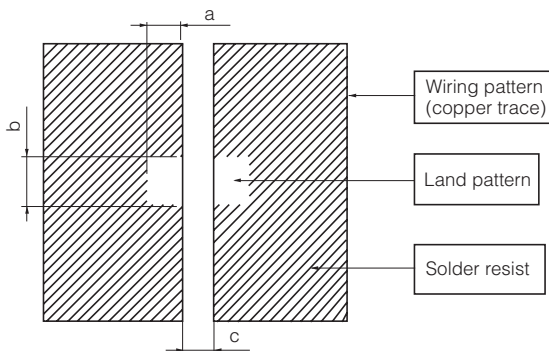


Dimensions in mm (not to scale)



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 |

Mouser Electronics

Authorized Distributor

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

Panasonic:

[ERJ-M1WSJ6M0U](#) [ERJ-M1WSJ3M0U](#) [ERJ-M1WSJ12MU](#) [ERJ-M1WSJ15MU](#) [ERJ-M1WSJ16MU](#) [ERJ-M1WSJ4M0U](#) [ERJ-M1WSJ5M0U](#) [ERJ-M1WSJ8M0U](#) [ERJ-M1WSF10MU](#) [ERJ-M1WSF12MU](#) [ERJ-M1WSF15MU](#) [ERJ-M1WSF20MU](#) [ERJ-M1WSF3M0U](#) [ERJ-M1WSF4M0U](#) [ERJ-M1WSF5M0U](#) [ERJ-M1WSF8M0U](#) [ERJ-M1WSJ10MU](#) [ERJ-M1WSJ20MU](#) [ERJ-M1WTF2M0U](#) [ERJ-M1WTF3M0U](#) [ERJ-M1WTF4M0U](#) [ERJ-M1WTJ1M0U](#) [ERJ-M1WTJ1M5U](#) [ERJ-M1WTJ2M0U](#) [ERJ-M1WTJ3M0U](#) [ERJ-M1WTF2M5U](#) [ERJ-M1WSF7M0U](#) [ERJ-M1WSF6M0U](#) [ERJ-M1WSF16MU](#) [ERJ-M1WTF1M0U](#) [ERJ-M1WTF1M5U](#) [ERJ-M1WSF3M5U](#) [ERJ-M1WSF6MU](#) [ERJ-M1WSJ7M0U](#) [ERJ-M1WTJ4M0U](#) [ERJ-M1WSF18MU](#)