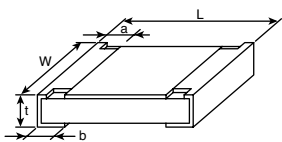


# PANASONIC Current Sense Resistors

RoHS Compliant This product is RoHS compliant.



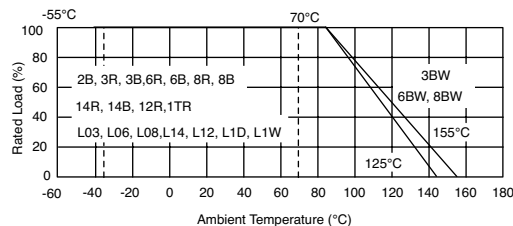
## ERJ-L SERIES



Type (in.)	DIMENSIONS: (mm)					Mass(lb) (g/1000pcs.)
	L	W	a	b	t	
ERJL03 (0603)	1.60 (±0.15)	0.80 (0.15±0.05)	0.30 (±0.20)	0.30 (±0.15)	0.45 (±0.10)	2
ERJL06 (0805)	2.00 (±0.20)	1.25 (±0.10)	0.40 (±0.20)	0.40 (±0.20)	0.60 (±0.10)	4
ERJL08 (1206)	3.20 (0.05±0.20)	1.60 (0.05±0.15)	0.50 (±0.20)	0.50 (±0.20)	0.60 (±0.10)	10
ERJL12 (1812)	4.50 (±0.20)	3.20 (±0.20)	0.50 (±0.20)	0.50 (±0.20)	0.60 (±0.10)	27

### Power Derating Curve

For resistors operated in ambient temperatures above 85°C, power rating shall be derated in accordance with the figure on the right.

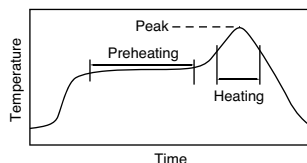


### Recommended Soldering Conditions:

- Reflow soldering shall be performed a maximum of two times
- Please contact us for additional information when used in conditions other than those specified
- Please measure the temperature of the terminals and study every kind of solder and printed circuit board for solderability before actual use.

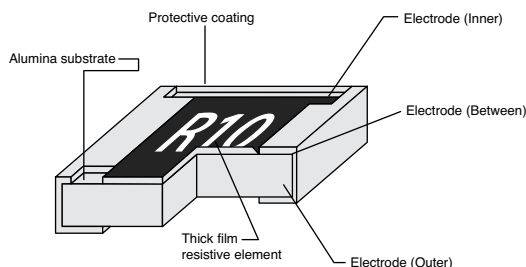
For soldering (Example: Sn/Pb)		
	Temperature	Time
Preheating	140°C to 160°C	60 s to 120 s
Main heating	Above 200°C	30 s to 40 s
Peak	235±5°C	max. 10 s

For lead-free soldering (Example: Sn/Ag/Cu)		
	Temperature	Time
Preheating	150°C to 180°C	60 s to 120 s
Main heating	Above 230°C	30 s to 40 s
Peak	max. 260°C	max. 10 s



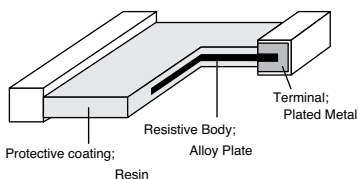
### Recommended soldering conditions for flow

	For soldering		For lead-free soldering	
	Temperature	Time	Temperature	Time
Preheating	140°C to 180°C	60 s to 120 s	150°C to 180°C	60 s to 120 s
Soldering	245 ± 5°C	20 s to 30 s	max. 260°C	max. 10 s

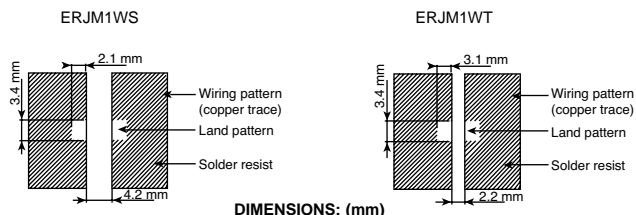
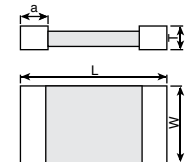


## ERJ-M1W SERIES

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



### Recommended Land Pattern

Type	Part No. (in.)	DIMENSIONS: (mm)				Mass(lb) (g/1000pcs.)
		L	W	T	a	
S Type	ERJM1WS (2512)	6.40 (±0.25)	3.25 (±0.25)	0.80 (±0.30)	1.00 (±0.25)	70
T Type	ERJM1WT (2512)	6.40 (±0.40)	0.30 (±0.25)	0.80 (±0.30)	2.10 (±0.30)	90

TABLE OF STOCKED VALUES											
Case Size	Value (mΩ)	Code	Case Size	Value (mΩ)	Code	Case Size	Value (mΩ)	Code	Value (mΩ)	Code	
0603	47	47M	1812	20	20M	2512	1	1M0	12	12M	
0603	50	50M	1812	22	22M	2512	2	2M0	15	15M	
0603	75	75M	1812	25	25M	2512	2.5	2M5	16	16M	
0603	100	10C	1812	33	33M	2512	3	3M0	20	20M	
0805	47	47M	1812	39	39M	2512	4	4M0	47	47M	
0805	50	50M	1812	47	47M	2512	5	5M0	50	50M	
0805	75	75M	1812	50	50M	2512	6	6M0	100	10C	
0805	100	10C	1812	75	75M	2512	8	8M0			
1206	47	47M	1812	100	10C	2512	10	10M			
1206	50	50M									
1206	75	75M									
1206	100	10C									

For quantities greater than 2000, call for quote.

Size	MOUSER STOCK NO.			Panasonic Part No.	Value (mΩ)	Power Rating @85°C	Tolerance	T.C.R. (ppm/°C)	Price Each			Price Per Piece	Reel Qty.
	Code	Value	Suffix						1	100	500		
0603	667-ERJ-L03KF-	Code-	V	ERJ-L03KF-Code-V	47-100	1/10W	±1%	±200				5000	
0805	667-ERJ-L06KF-	Code-	V	ERJ-L06KF-Code-V	47-100	1/8W	±1%	±100				5000	
1206	667-ERJ-L08KF-	Code-	V	ERJ-L08KF-Code-V	47-100	1/4W	±1%	±100				5000	
1812	667-ERJ-L12KF-	Code-	V	ERJ-L12KF-Code-V	47-100	1/2W	±1%	±100				5000	
2512	667-ERJ-M1WTF-	Code-	U	ERJ-M1WTF-Code-U	1 - 1.5	1W	±1%	350±100				3000	
2512	667-ERJ-M1WTJ-	Code-	U	ERJ-M1WTJ-Code-U	2.0	1W	±5%	100±50				3000	
2512	667-ERJ-M1WSF-	Code-	U	ERJ-M1WSF-Code-U	3.0 - 4.0	1W	±1%	±350				3000	
2512	667-ERJ-M1WSF-	Code-	U	ERJ-M1WSF-Code-U	5.0 - 20	1W	±1%	±350				3000	