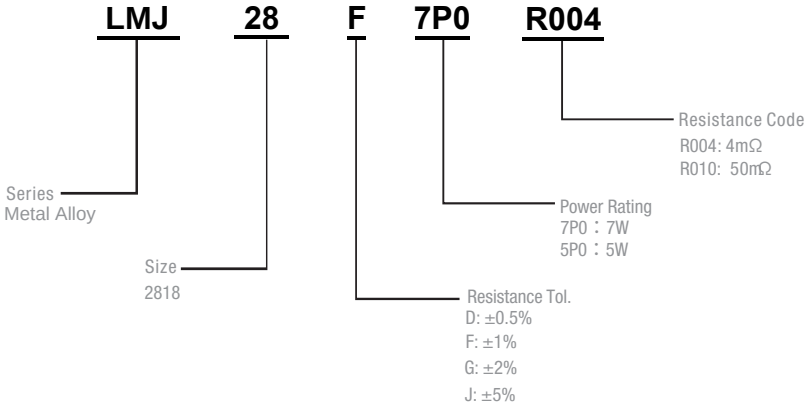
Metal Strip High Power Resistors

LMJ2818

Description

- Thick copper material conductor
- Ultra-long-term stability
- High rated power
- Outstanding reliability
- Very low inductance (< 5 nH).
- Extremely low temperature coefficient (good TCR)
- Halogen-free and lead-free, compliant with RoHS

Part Numbering System



Type	Rating Power at 70℃	T.C.R. (ppm/℃)	Resistance Range(mΩ) 0.5%（D） 1.0%（F） 2.0%（G） 5.0%（J）	Operating Temperature(℃)
LMJ2818	5W&7W	±200	4~6	-55°C~170°C
		±75	7~50	

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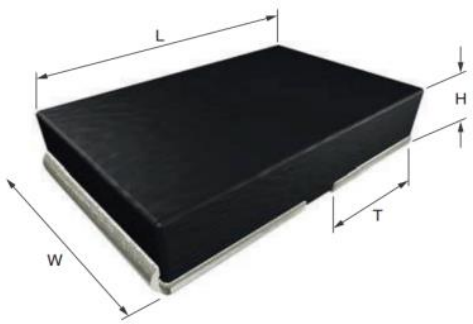
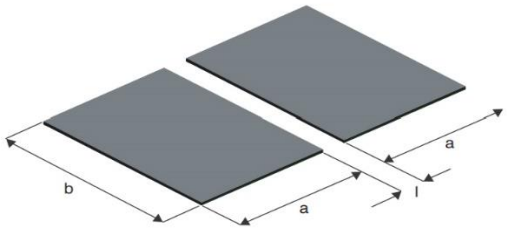
Construction



Unit: mm

Type	Resistance (mΩ)	L	H	T	W
LMJ2818	4~50	7.15±0.254	1.50±0.254	2.9±0.254	4.50±0.254

Recommended land pattern

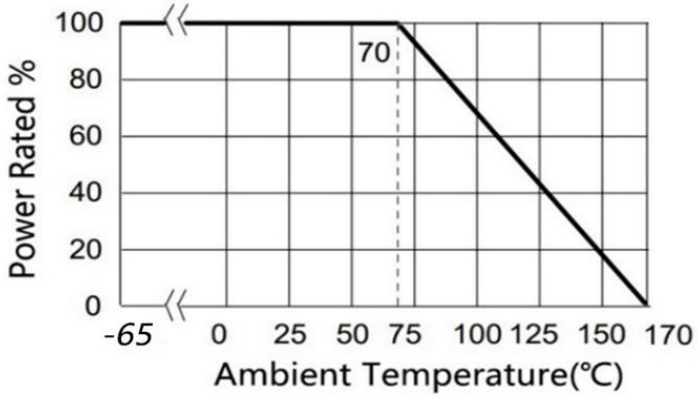


Unit: mm

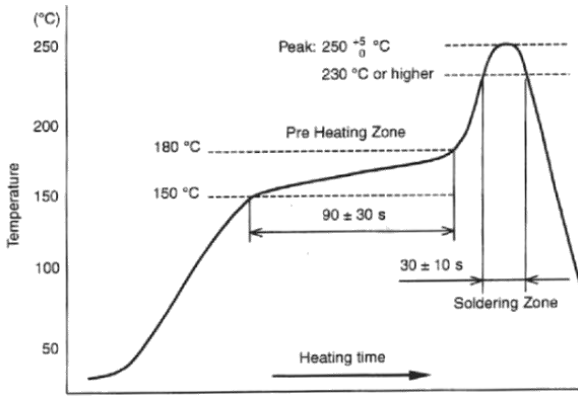
Type	a	b	l
LMJ2818	3.5	5.3	0.6

Power Derating Curve

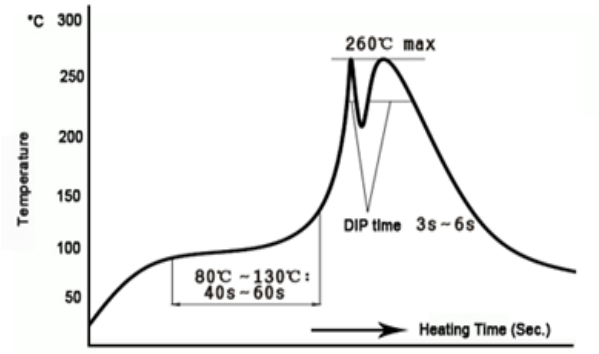
For resistors operated in ambient temperatures 70°C, power rating shall be derated inaccording with the curve below:



IR Reflow-Soldering Profile



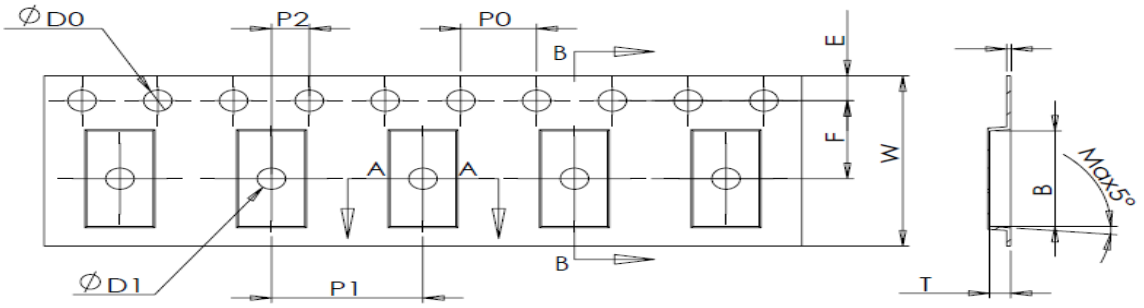
Wave- Soldering Profile



Product Characteristics

Item	Test condition/ Methods	Limited
Temperature coefficient of resistance	TCR =(R-R_0)/R_0(T_2-T_1)X 10^6 R_0: resistance of room temperature R: resistance of 125℃ T_1: Room temperature T_2: Temperature at 125℃	Refer to Spec
Short time Overload	4 X rated power for 5s	±0.5%
Resistance to Soldering Heat	260℃± 5℃ time: 10sec± 1sec	±0.5%
Temperature Cycling	-55 °C to +150 °C, 1000 cycles, 15 min at each extreme	±0.5%
Low temperature Operation	The resistance change rate was measured after the sample was placed in a constant temperature box at -55 ± 2°C for 96 hours and then left to stand for more than 1 hour.	±0.5%
High Temperature Storage	1000hours at 170℃,No power	±1%
Bias Humidity	+85℃, 85% RH, 10%bias, 1000hours	±0.5%
Solderability	After being immersed in a furnace at 245 ± 5°C for 3 ± 1 seconds, take it out and observe the soldering area under a magnifying glass.	The area of the electrode covered with new tin should be greater than 95%.
Load life	1000 hours at 70℃± 2℃,apply rated power, 1.5h"On",0.5hr "0ff"	±1%
Terminal bending	Weld it into the bending test plate, place it on the bending test machine, apply 2.5kg force in the center of the test plate, press 2mm under the load for 60s, and measure the resistance change rate.	±0.5%

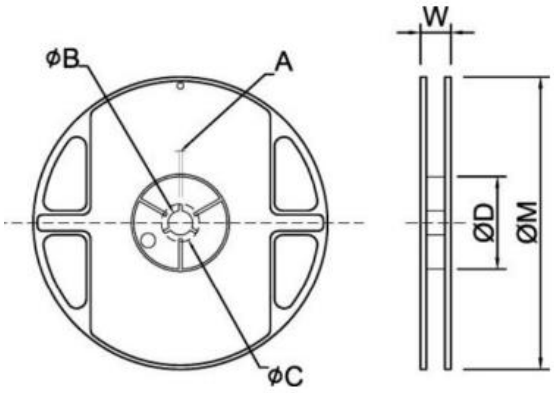
Tapping & Package



Unit: mm

Type	A ±0.1	B ±0.1	D0 +0.1	E ±0.1	F ±0.1	D1 ±0.1	W ±0.3	P0 ±0.1	P1 ±0.1	P2 ±0.1	T	Quantity (pcs)
2818	5.21	7.69	1.5	1.75	7.5	1.5	16.0	4.0	8.0	2.0	1.97	1,000

Reel Specification



Unit: mm

Type	A	B	C	D	W	M
2818	3.0±0.5	13.5±0.5	＞22	56.0±0.5	18.0±0.5	178±1