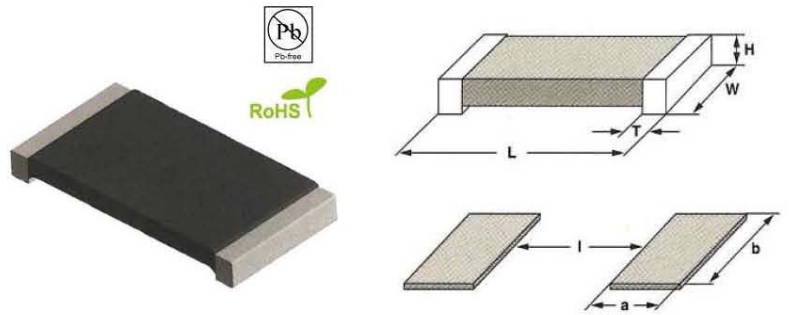


Metal Alloy Low-Resistance Resistor

APPLICATION

- Power Supply
- Battery Pack
- DIY tools
- Inverter/Converter (AC/DC, DC/DC, DC/AC)
- Measurable instrument
- Consumer Electronics
- Note Book
- PC Power Pack
- LED driver
- Others (Auto Tronics... etc.)

DIMENSIONS



Unit: in inches (millimeters)

Model	DIMENSIONS					BOLDER PAD DIMENSIONS		
	Resistance Range mΩ	L	W	H	T	a	b	i
LR1206 1W	1~50	0.12±0.010 (3.15±0.254)	0.062±0.010 (1.60±0.254)	0.029±0.010 (0.750±0.254)	0.02±0.010 (0.50±0.254)	0.063(1.60)	0.086(2.18)	0.026(0.66)
LR2010 1W	0.5~3	0.20±0.010 (5.10±0.254)	0.10±0.010 (2.54±0.254)	0.031±0.010 (0.8±0.254)	0.051±0.010 (3.15±0.254)	0.011(1.80)	0.115(2.92)	0.048(1.22)
	4~100				0.031±0.010 (0.8±0.254)			0.009(2.29)
LR2512 1W, 1.5W, 2W	0.5~4	0.246±0.010 (6.25±0.254)	0.13±0.010 (3.30±0.254)	0.031±0.010 (0.8±0.254)	0.074±0.010 (1.88±0.254)	0.120(3.05)	0.145(3.68)	0.050(1.27)
	4.1~100				0.044±0.010 (1.13±0.254)			0.083(2.11)
LR2512 3W	0.5~1.5	0.246±0.010 (6.25±0.254)	0.13±0.010 (3.30±0.254)	0.031±0.010 (0.8±0.254)	0.074±0.010 (1.88±0.254)	0.120(3.05)	0.145(3.68)	0.050(1.27)
	1.6~10				0.044±0.010 (1.13±0.254)			0.083(2.11)
LR2725 4W	0.25, 0.5	0.268±0.010 (6.8±0.254)	0.264±0.010 (6.7±0.254)	0.039±0.010 (1.0±0.254)	0.085±0.010 (2.15±0.254)	0.125(3.2)	0.27(6.9)	0.052(1.32)
	1			0.043±0.010 (1.1±0.254)	0.085±0.010 (2.15±0.254)			
	1.5			0.039±0.010 (1.0±0.254)	0.085±0.010 (2.15±0.254)			
	2			0.071±0.010 (1.8±0.254)	0.085±0.010 (2.15±0.254)			
	2.5			0.035±0.010 (0.9±0.254)	0.065±0.010 (1.65±0.254)			
	3			0.051±0.010 (1.3±0.254)	0.065±0.010 (1.65±0.254)			
LR2728 3W, 3.5W, 4W	4~100	0.264±0.010 (6.7±0.254)	0.283±0.010 (7.2±0.254)	0.039±0.010 (1.0±0.254)	0.045±0.010 (1.15±0.254)	0.108(2.75)	0.308(7.8)	0.136(3.5)

Remark: 1.0 Watts with total solder pad trace size of 100mm²
 1.5 Watts with total solder pad trace size of 200mm²
 2.0 Watts with total solder pad trace size of 300mm²
 3.0 Watts with total solder pad trace size of 300mm²
 3.5 Watts with total solder pad trace size of 3200mm²
 4.0 Watts with total solder pad trace size of 400mm²

STANDARD ELECTRICAL SPECIFICATIONS

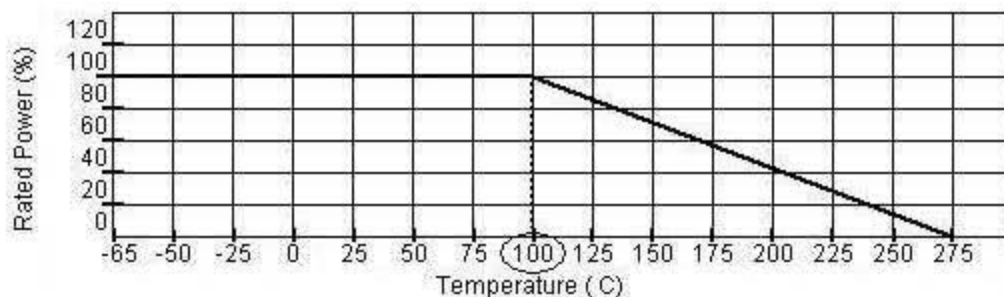
Type	1206 (mΩ) 1W	2010 (mΩ) 1W	2512 (mΩ) 1W, 1.5W, 2W	2512 (mΩ) 3W	2725 (mΩ) 4W	2728 (mΩ) 3W, 3.5W	2728 (mΩ) 4W
TCR (ppm/°C)	1~4: +50 4.1~15: -25 15.1~50: -15	0.5~3: +50 3.1~6.9: -25 7~100: -15	0.5~3: +50 3.1~6.9: -25 7~100: -15	0.5~1.5: +50 1.6~10: -25	0.25~0.9: +50 1~3: -25	4~7: -25 7.1~100: -15	4~7: -25 7.1~50: -15

Metal Alloy Low-Resistance Resistor

STANDARD ELECTRICAL SPECIFICATIONS

Model	Power Rating at 100°C (Watts)	Operating Temperature Range (°C)	Max. Rating Current	Max. Overload Current	Resistance Range mΩ		
					0.5% (D)	1.0% (F)	5.0% (J)
LR1206	1.0	- 65 ~ + 275	31.62A	126.49A	7~50	1~50	1~50
LR2010	1.0		44.72A	178.89A	3~100	0.5~100	0.5~100
LR2512	1.0		44.72A	223.61A	7~100	0.5~100	0.5~100
	1.5		54.77A	273.86A			
	2.0		63.25A	252.98A	7~75	0.5~75	0.5~75
	3.0		77.46A	232.38A	7~10	0.5~10	0.5~10
LR2725	4.0		126.49A	505.96A		0.25~3	0.25~3
LR2728	3.0		27.39A	82.16A	4~100	4~100	4~100
	3.5		29.58A	88.74A			
	4.0		31.62A	126.49A	4~50	4~50	4~50

POWER DERATING CURVE:

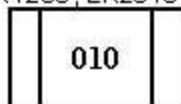


PERFORMANCE

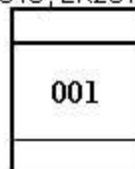
Test Item	Conditions of test	Test Method
Thermal Shock	-55°C to +125°C, 1000 cycles, 15 minutes at each extreme	JIS C5202 7.4
Solderability test	Steam aging: 4hrs, cool down 30 minutes then test	JIS C5202 6.5
Low Temperature Storage	-55°C for 1000 hours	JIS C5202 7.1
High Temperature Exposure	1000 hours @ +155°C	JIS C5202 7.2
Bias Humidity	+85°C, 85% RH, 10% Bias, 1000 hours, 90 minutes "ON", 30 minutes "OFF"	JIS C5202 7.9
Mechanical Shock	100 grams for 6 milliseconds, 5 pulses	JIS C5202 6.13
Vibration	Frequency varied 55Hz in one minute, 3 directions, 12 hours	JIS C5202 6.7
Load Life	1000 hours @ rated power, +100°C, 1.5 hours "ON", 0.5 hours "OFF"	JIS C5202 7.10
Resistance to Solder Heat	Solder temp./immersion time: 260±5°C, 10±1secs and 350±10°C, 3.5±0.5secs	JIS C5202 6.4
Moisture Resistance	Mil-STD-202, Method 106, 0% power, 7a and 7b not required	JIS C5202 7.6
Resistance to solvent	Immersion time: 60±5 secs, 20°C~25°C	JIS C5202 6.9

MARKING

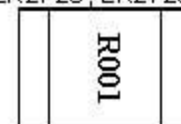
LR1206, LR2010, LR2512



LR2010, LR2512



LR2725, LR2728



PACKAGING

Model	Reel			
	Tape Width	Diameter	Pieces/Reel	Code
LR1206	8mm/Embossed Plastic	178mm/7"	2,000	2
LR2010	12mm/Embossed Plastic	178mm/7"	2,000	2
LR2512	12mm/Embossed Plastic	178mm/7"	1,000	1
LR2725	12mm/Embossed Plastic	178mm/7"	1,000	1
LR2728	12mm/Embossed Plastic	178mm/7"	1,000	1