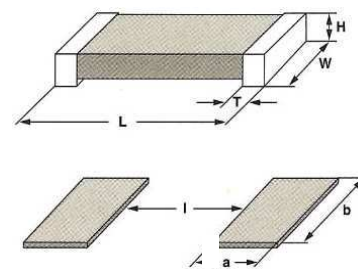


Metal Alloy Low-Resistance Resistor

DIMENSIONS

LR 1206, LR 2010, LR 2512,
LR 2725, LR 2728



Unit: mm

Model	DIMENSIONS						BOLDER PAD DIMENSIONS			
	Power at 100°C	Resistance Range (mΩ)	L	W	H	T	a	b	i	
LR1206	0.5 W	2~50	3.15±0.254	1.60±0.254	0.750±0.254	0.50±0.254	1.60	2.18	0.66	
LR 2010	1 W	0.5~3	3.15±0.254	2.54±0.254	0.8±0.254	3.15±0.254	1.80	2.92	1.22	
		4~100				0.80±0.254				2.29
LR 2512	1 W	0.5~4	6.25±0.254	3.30±0.254	0.8±0.254	1.88±0.254	3.05	3.68	1.27	
		5~100				1.13±0.254				2.11
LR 2512	2 W	0.5~4	6.25±0.254	3.30±0.254	0.8±0.254	1.88±0.254	3.05	3.68	1.27	
		5~75				1.13±0.254				2.11
LR 2512	3 W	0.5~1.5	6.25±0.254	3.30±0.254	0.8±0.254	1.88±0.254	3.05	3.68	1.27	
		2~10				1.13±0.254				2.11
LR 2512G	1W	2.5	6.35±0.254	3.18±0.254	1.0	1.3±0.3	1.85	3.5	2.9	
		3								
		3.5								
		4								
		4.5								
		5								
		5.5								
	2W	6								0.65
		6.5								
		7								
		0.5								
		0.75								
		1								
		1.5								
2W	2	0.5								
	0.5									
	0.5									

Remark: LR 1206(0.5W) 0.5 Watts with total solder pad trace size of 100 mm²
 LR 2010(1W) & LR 2512(1W) 1 Watts with total solder pad trace size of 100 mm²
 LR 2512(2W) 2 Watts with total solder pad trace size of 300 mm²
 LR 2512(3W) 3 Watts with total solder pad trace size of 400 mm²
 LR 2725(4W) & LR 2728(4W) 4 Watts with total solder pad trace size of 400 mm²
 LR 2728(3W) 3 Watts with total solder pad trace size of 200 mm²

Metal Alloy Low-Resistance Resistor

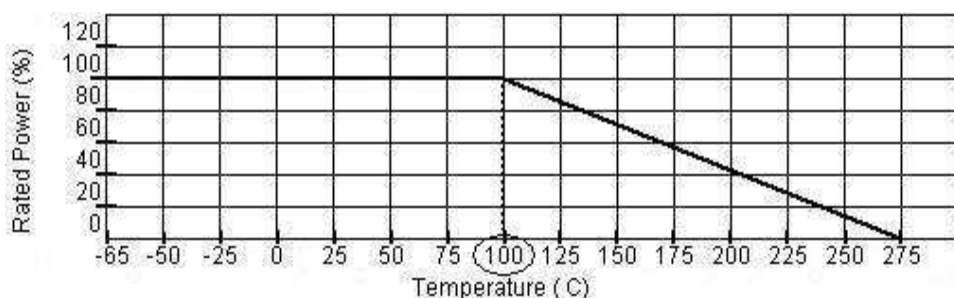
STANDARD ELECTRICAL SPECIFICATIONS

Model	Power Rating at 100°C	Operating Temperature Range (°C)	Maximum Working Voltage (V)	Resistance Range (mΩ)			Temperature Coefficient (ppm/°C)	
				0.5% (D)	1.0% (F)	5.0% (J)		
LR 1206	0.5W	-65 ~ +275	(P x R) ½	7~50	2~50	2~50	2~4 = +50 5~15 = -25 16~50 = -15	
LR 2010	1 W			3~100	0.5~100	0.5~100	0.5~3 = +50 4~6.9 = -25 7~100 = -15	
LR 2512	1 W			7~100	0.5~100	0.5~100	0.5~3 = +50 4~6.9 = -25 7~100 = -15	
LR 2512	2 W			7~75	0.5~75	0.5~75	0.5~3 = +50 4~6.9 = -25 7~75 = -15	
LR 2512	3 W			7~10	0.5~10	0.5~10	0.5~2 = +50 3~10 = -25	
LR 2725	4 W					0.25~3	0.25~3	0.25~0.9 = +50 1~3 = -25
LR 2728	3 W			4~100	4~100	4~100	4~7 = -25 8~100 = -15	
LR 2728	4 W			4~50	4~50	4~50	4~7 = -25 8~50 = -15	

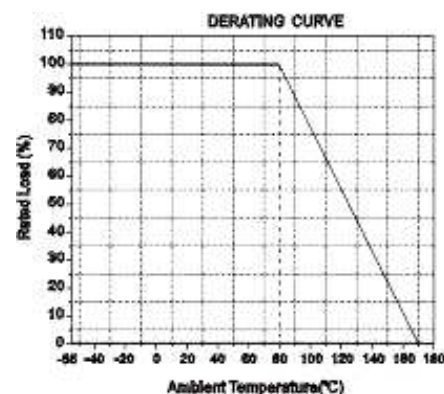
Model	Power Rating at 80°C	Operating Temperature Range (°C)	Maximum Working Voltage (V)	Resistance Range (mΩ)			Temperature Coefficient (ppm/°C)
				1.0% (F)	3.0% (H)	5.0% (J)	
LR 2512G	1W	-55 ~ +170		2.5~7	2.5~7	2.5~7	2.5~3 = ±150 3.5~5.5 = ±100 6~7 = ±75 0.5~2 = ±50
	2W			0.75~2	0.5~2	0.5	
LH 2512	2W			7~10	7~10	7~10	0.5~0.75 = ±100 3 = ±75
	2.5W			4~6	4~6	4~6	1~2, 4~10 = ±50
	3W			0.5~3	0.5~3		

POWER DERATING CURVE:

LR1206, LR2010, LR2512,
LR2725, LR2728



LR2512G, LH2512



PERFORMANCE

LR1206, LR2010, LR2512, LR2725, LR2728

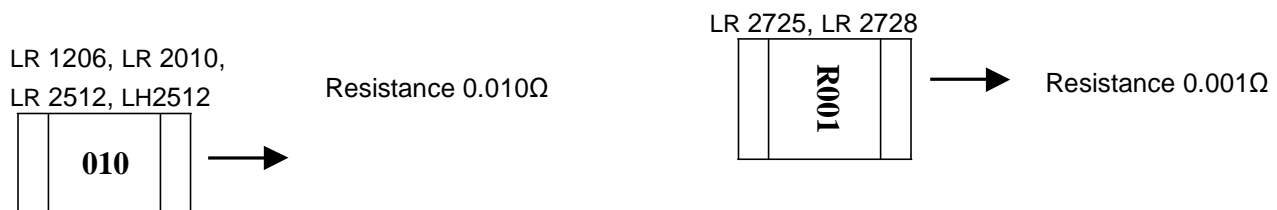
Test Item	Conditions of test	Test Method
Thermal Shock	-55°C to +125°C, 1000 cycles, 15 minutes at each extreme	JIS C5202 7.4
Solder ability test	Steam aging: 4hrs, cool down 30 minutes then test	JIS C5202 6.5
Low Temperature Storage	-55°C for 1000 hours	JIS C5202 7.1
High Temperature Exposure	1000 hours @ +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

Metal Alloy Low-Resistance Resistor

LR2512G, LH2512

ITEM	LH 2512	LR 2512G
Short Time Overload	±1%	±(0.5%+0.5mΩ)
Load Life	±1%	±(1%+0.5mΩ)
Solderability	Coverage > 95%	Coverage > 95%
High Temperature Storage	±1%	±(1%+0.5mΩ)
Thermal Shock	±1%	±(0.5%+0.5mΩ)
Low Temperature Operation	±1%	±(0.5%+0.5mΩ)
Moisture Resistance	±1%	±(0.5%+0.5mΩ)
Solder Heat	±1%	±(0.5%+0.5mΩ)

MARKING



PACKAGING

Model	Reel			
	Tape Width	Diameter	Pieces/Reel	Code
LR 1206	8mm/Embossed Plastic	178mm/7"	2,000	2
LR 2010	12mm/Embossed Plastic	178mm/7"	2,000	2
LR 2512	12mm/Embossed Plastic	178mm/7"	1,000	1
LR 2512G	12mm/Embossed Plastic	178mm/7"	2,000	2
LH 2512	12mm/Embossed Plastic	178mm/7"	2,000	2
LR 2725	12mm/Embossed Plastic	178mm/7"	1,000	1
LR 2728	12mm/Embossed Plastic	178mm/7"	1,000	1