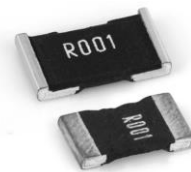


# LR2512H

## Metal Alloy Low-Resistance Resistor



- This specification is applicable to lead free and halogen free for LR2512H-3W 10.1mΩ~80.0mΩ metal alloy low-resistance resistor.

### GENERAL SPECIFICATIONS

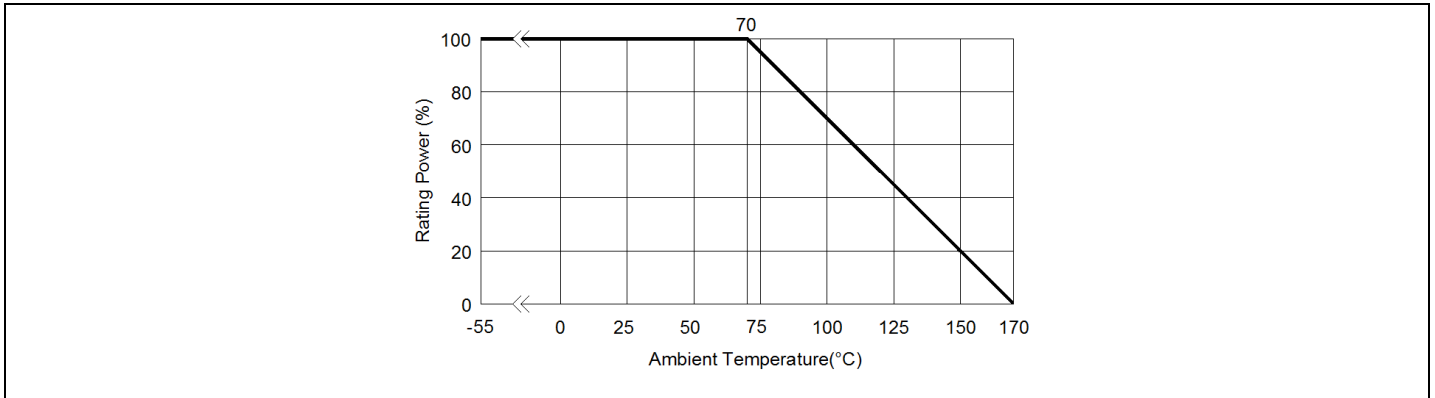
Type	Rating Power	Rating Current	Overload Current	T.C.R. (ppm/°C)	Resistance Range (mΩ)		Operating Temperature Range
					D (±0.5%)	F (±1%)	
						G (±2%)	
		J (±5%)					
2512H	2W	12.91A	28.87A	12~18mΩ : ≤±50 76~200mΩ : ≤±100	-	12~18 76~200	-55~170°C
	3W	17.3A	38.54A	10.1~80.0mΩ : ≤±50	10.1~50.0	10.1~80.0	

### CHARACTERISTICS

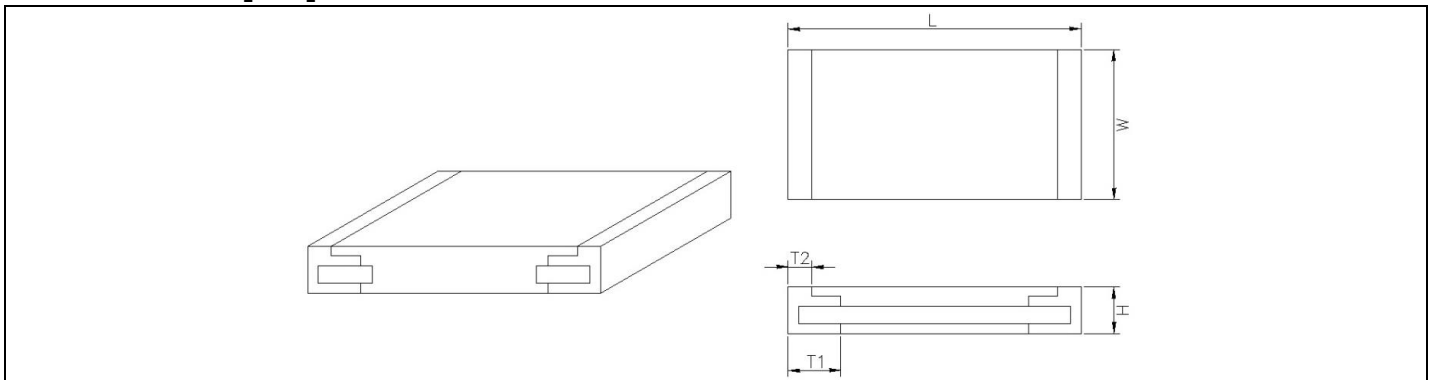
Temperature Coefficient of Resistance	Refer to Paragraph general specifications	JIS C 5201-1 4.8 Method; $TCR(ppm/°C) = \{(R2-R1)/R1(T2-T1)\} \times 10^6$ R1 : Resistance of room temp.(T1), R2 : Resistance of 150°C(T2)
Short Time Overload	$(\Delta R/R1) \leq \pm 0.5\%$	JIS C 5201-1 4.13 Method; 5times rated power, 5seconds
Insulation Resistance	$\geq 10^9 \Omega$	JIS C 5201-1 4.6 Method; DC100V <sub>DC</sub> for 1minute
Dielectric Withstanding Voltage	No short or burned on the appearance	JIS C 5201-1 4.7 Method; Applied AC500V <sub>AC</sub> for 1minute, Limit surge current maximum 50mA
Resistance to Solder Heat	$(\Delta R/R1) \leq \pm 0.5\%$	JIS C 5201-1 4.18 Method; Solder temperature/immersion time : 260±5°C, 10±1seconds
Solderability	95% coverage	JIS C 5201-1 4.17 Method; 245±5°C, 3±0.5 seconds
Resistance to solvent	$(\Delta R/R1) \leq \pm 0.5\%$	JIS C 5201-1 4.29 Method : Immersion time : 60 seconds, @20°C~25°C
Low Temperature Exposure(Storage)	$(\Delta R/R1) \leq \pm 0.5\%$	JIS C 5201-1 4.23.4 Method : 1,000hours, @-55°C
High Temperature Exposure(Storage)	$(\Delta R/R1) \leq \pm 1.0\%$	JIS C 5201-1 4.23.2 Method : 1,000hours, +170°C
Temperature Cycling (Rapid Temp. Change)	$(\Delta R/R1) \leq \pm 0.5\%$	JIS-C5201-1 4.19 Method : -55°C to +150°C, 1,000cycles, Dwell time : 30min maximum.
Moisture Resistance (Climatic Sequence)	$(\Delta R/R1) \leq \pm 0.5\%$	Mil-STD-202, Method 106
Bias Humidity	$(\Delta R/R1) \leq \pm 0.5\%$	JIS C 5201-1 4.24 Method : +85°C, 85% RH, 10% Bias, 1.5 hours On, 0.5 hours Off. Extended Life Test : 1,000 hours.
Load Life	$(\Delta R/R1) \leq \pm 1.0\%$	JIS C 5201-1 4.25 Method : Test temperature 70°C Rated working voltage 1.5hours On, 0.5hours Off. Extended Life Test : 1,000 hours

\* Remark:  $\Delta R$  = (resistance after stress – resistance before stress); R1 means resistance before stress

■ DERATING CURVE

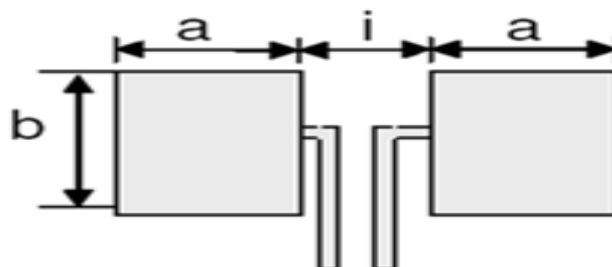


■ DIMENSIONS [mm]



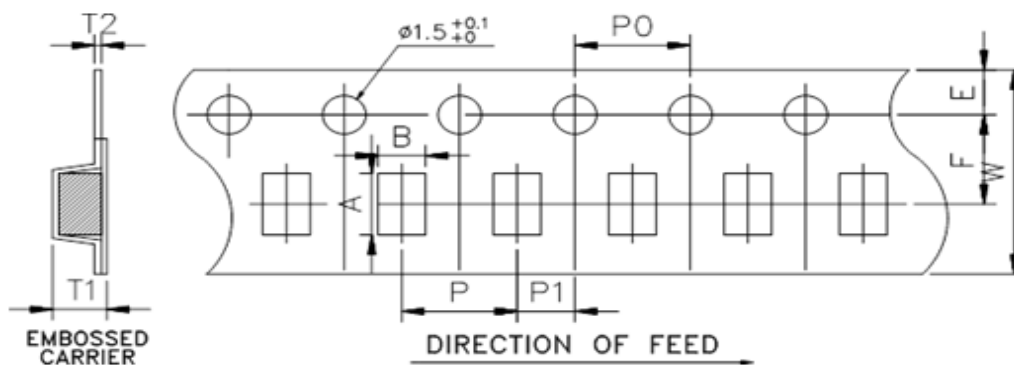
Type	Rating Power	Resistance Range (mΩ)	Dimensions – in inches (millimeters)				
			L	W	H	T1	T2
LR2512H	2.0	12~18	0.246±0.010 (6.248±0.254)	0.126±0.010 (3.202±0.254)	0.039±0.010 (1.000±0.254)	0.044±0.010 (1.118±0.254)	0.0039~0.0394 (0.1~1.0)
		76~200				0.034±0.010 (0.868±0.254)	
	3.0	10.1~75.0				0.044±0.010 (1.118±0.254)	
		75.1~80.0				0.034±0.010 (0.868±0.254)	

■ SOLDER PAD DIMENSIONS

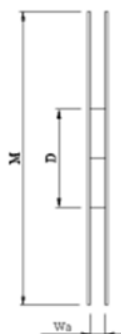
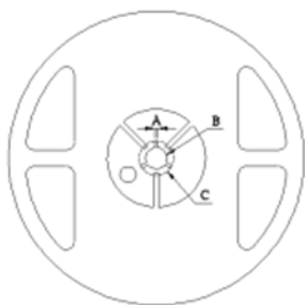


MODEL	Maximum Power Rating (Watts)	Resistance Range (mΩ)	Dimensions - in millimeters		
			a	b	i
LR2512H	2.0	12~18 76~200	2.11	3.68	3.18
	3.0	10.1~80.0	2.19		3.00

■ PACKAGING



DIM	A	B	W	E	F	T1	T2	P	P0	10*P0	P1
LR 2512H	6.75±0.10	3.55±0.10	12.0±0.30	1.75±0.10	5.5±0.10	1.60±0.10	0.20±0.10	4.0±0.10	4.0±0.10	40.0±0.20	2.0±0.10



Reel Type / Tape	W	M	A	B	C	D
7" reel for 12 mm tape	13.8 ± 0.5	178 ± 2.0	2.0 ± 0.5	13.5 ± 0.5	21.0 ± 0.5	80.0 ± 1.0

\*Packaging Quantity

MODEL	Tape width	Max. Packaging Quantity (pcs/reel)		
		Embossed Plastic Type		
		4mm pitch	8mm pitch	12mm pitch
LR2512H	12mm	2,000pcs	--	--

■ MARKING FORMAT

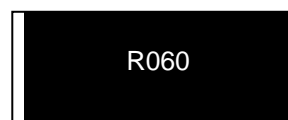
- All the products marking are 4 digits

a. "R" designated the decimal location in ohms.

Ex) For 25mΩ the product marking is R025;

b. "m" designated the decimal location in milliohms.

Ex) For 10.5mΩ the product marking is 10m5;



■ ORDERING PROCEDURE EXAMPLE

LR2512H	2	3	R001	F	2
Model	Number of terminals	Rated Power	Resistance	Tolerance	Packing 2=2,000pcs