

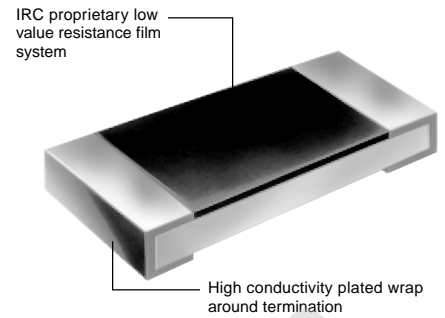
# LOW VALUE FLAT CHIP RESISTOR

ISO-9001  
Registered



## LRC / LRF SERIES

- Standard 2512, 2010 and 1206 sizes
- Resistance values down to 0.003 ohms
- Leach resistant solder-plated copper wrap-around termination
- Low inductance - less than 0.2nH
- Standard EIA Tape - 1206 = 8mm; 2010 or 2512 = 12mm

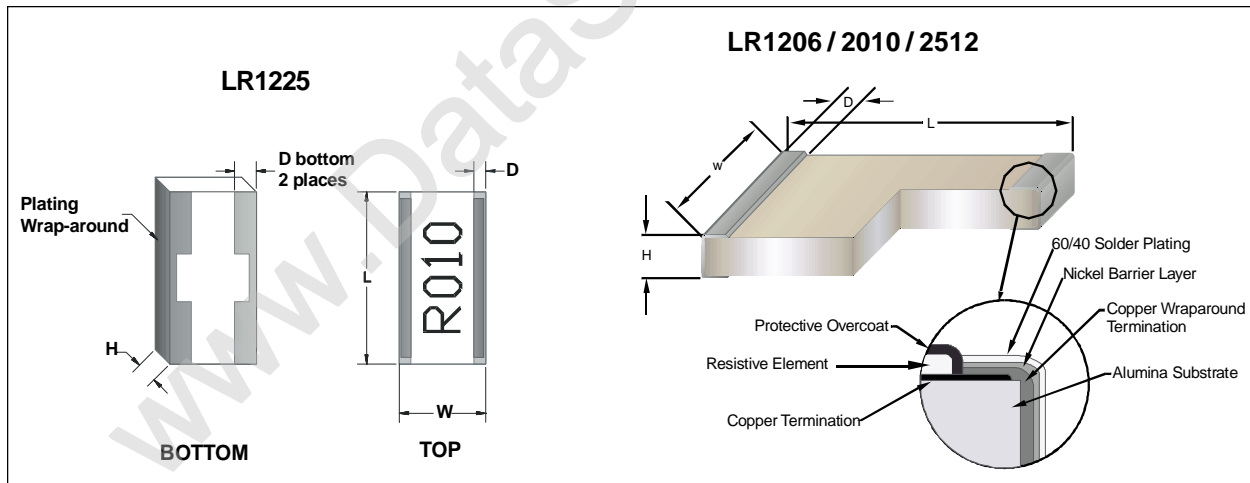


### SPECIFICATIONS:

Model	Resistance Range (Ohms)	TCR (ppm/°C)	Power Rating at 70°C (Watts)	Dielectric Withstanding Voltage	Temperature Rise at Rated Power	Pad and Trace Area for Max Power Rating @ 70°C
LR1206	0.010 to 1	±100 (Contact factory for value below 0.050 ohms)	0.5	200	40°C	30 mm <sup>2</sup>
LR2010	0.003 to 1		1.0	200	80°C	30 mm <sup>2</sup>
LR2512	0.003 to 1		1.5 / 2.0*	200	90°C	100 mm <sup>2</sup>
LR1225	0.003 to 0.10		2.0	200	80°C	200 mm <sup>2</sup>

\* 2 Watts with total solder pad and trace size of 300 mm<sup>2</sup>

### CONSTRUCTION & MECHANICAL DIMENSIONS:



SIZE		L	W	H	D	D bottom
LR1206	in.	0.126 ± 0.012	0.064 ± 0.008	0.024 ± 0.004	0.019 ± 0.010	0.019 ± 0.010
	mm	3.20 ± 0.305	1.63 ± 0.203	0.061 ± 0.102	0.48 ± 0.25	0.48 ± 0.25
LR2010	in.	0.206 ± 0.015	0.104 ± 0.010	0.029 ± 0.004	0.019 ± 0.010	0.019 ± 0.010
	mm	5.23 ± 0.38	2.64 ± 0.25	0.74 ± 0.1	0.48 ± 0.25	0.48 ± 0.25
LR2512	in.	0.256 ± 0.015	0.128 ± .010	0.029 ± 0.004	0.019 ± 0.010	0.019 ± 0.010
	mm.	6.50 ± 0.38	3.25 ± 0.25	0.74 ± 0.1	0.48 ± 0.25	0.48 ± 0.25
LR1225	in.	0.128 ± 0.010	0.256 ± 0.015	0.029 ± 0.004	0.020 ± 0.010	0.031 ± 0.005
	mm.	3.25 ± 0.25	6.5 ± 0.38	0.74 ± 0.1	0.48 ± 0.25	0.79 ± 0.12

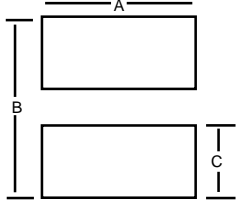
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## Environmental Performance

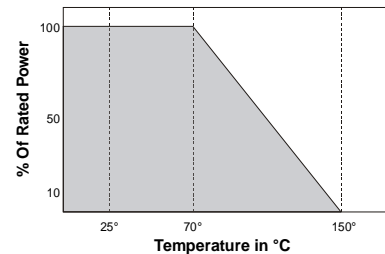
Characteristic	Test Method	Performance
Thermal Shock	MIL-STD-202 Method 107 Condition B, -65°C +125°C	±0.5%
Short Time Overload	MIL-PRF-55342	±0.5%
High Temperature Exposure	MIL-PRF-55342	±0.5%
Temperature Cycling	MIL-STD-883 Method 1010 Test Condition B	±0.25%
Moisture	MIL-PRF-55342	±0.5%
Load Life	MIL-PRF-55342 Rated Power @ 70°C	±1.0%
Low Temperature Operation	MIL-PRF-55342	±0.5%
Low Temperature Storage	-65°C, 100 Hours	±0.5%
Resistance to Solder Heat	MIL-STD-202 Method 210	±0.25%
Leach Resistance	Molten Solder 250°C	90 seconds minimum

## Recommended Solder Pad Dimensions

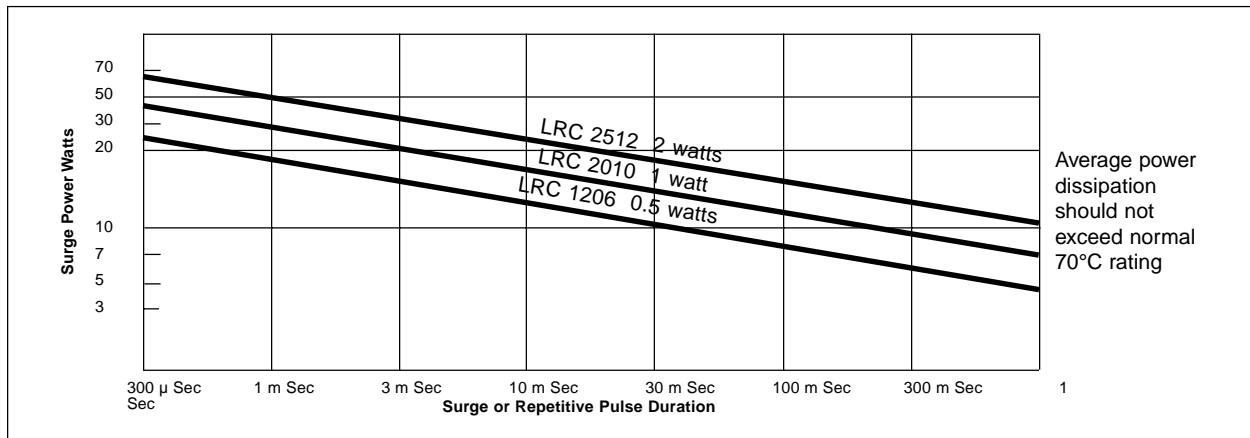


DIM.		LR1206	LR2010	LR2512	LR1225
A	in.	0.080	0.120	0.145	0.305
	mm	(2.0)	(3.05)	(3.7)	(7.75)
B	in.	0.160	0.255	0.305	0.175
	mm	(4.0)	(6.5)	(7.75)	(4.45)
C	in.	0.050	0.060	0.060	0.06
	mm	(1.25)	(1.5)	(1.5)	(1.5)

## Derating Curve



## Pulse and Surge Capability



## HOW TO ORDER

Sample Part Number: LRC - LR 2010 - 01 - R040 - J

### MODEL

LR = Resistance ranges above .025 ohm  
LRF = Resistance range .025 and below

### SIZE:

1206, 2010, 2512, 1225

### TCR CHARACTERISTIC

01 = ±100 ppm/°C (Standard)

### TOLERANCE

F = ±1%; G = ±2%; J = ±5%; K = ±10%

### RESISTANCE CODE

Standard MIL code with "R" signifying decimal place.