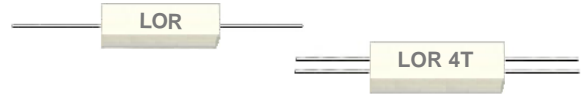


PRECISION LOW-OHM METAL PLATE RESISTORS

LOR SERIES 2-Terminal & 4-Terminal

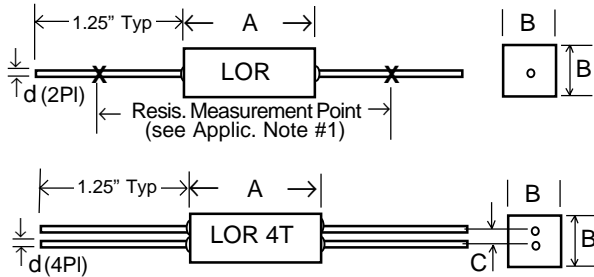


- ☐ Ideal for current sense applications
- ☐ 0.0025Ω to .25Ω, 0.1% to 10%
- ☐ Low TC, high pulse capability
- ☐ Non-inductive metal element
- ☐ Available on RCD's exclusive **SWIFT™** delivery program!



OPTIONS

- ☐ Option 4T: 4 Terminal
- ☐ Option E: Low thermal emf design
- ☐ Non-std resistance values, custom marking, burn-in, etc.



STANDARD RESISTANCE VALUES AND CODES

(Non-standard values available, most popular values listed in bold)
 .0025Ω (R0025), .003Ω (R003), **.005Ω** (R005), .0068Ω (R0068), .0075Ω (R0075),
 .0082Ω (R0082), **.01Ω** (R010 if ≤1%, R01 if ≥2%), .012Ω (R012), **.015Ω** (R015),
.02Ω (R020 if ≤1%, R02 if ≥2%), .022Ω (R022), **.025Ω** (R025), **.03Ω** (R030 if
 ≤1%, R03 if ≥2%), .033Ω (R033), **.04Ω** (R040 ≤1%, R04 ≥2%), **.05Ω** (R050 ≤1%,
 R05 ≥2%), .068Ω (R068), **.07Ω** (R070 if ≤1%, R07 if ≥2%), .075Ω (R075),
.08Ω (R080 if ≤1%, R08 ≥2%), **.1Ω** (R100 if ≤1%, R10 ≥2%), .15Ω (R150 if
 ≤1%, R15 ≥2%), .2Ω (R200 if ≤1%, R20 ≥2%), .25Ω (R250 if ≤1%, R25 ≥2%).

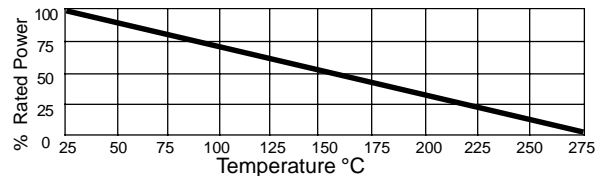
RCD TYPE	WATTAGE @25°C	MAX CURRENT RATING ¹	RESISTANCE RANGE (OHMS)	RESISTANCE MEASUREMENT POINT ±.062 [1.6]	DIMENSIONS			
					A ±.04 [1]	B ±.032 [.8]	d ±.002 [.05]	C ² ±.032 [.8]
LOR3	3W	25A	.0025 to .25	1.310 [33.3]	.551 [14]	.256 [6.5]	.032 [.8] ³	.075 [1.9]
LOR4	4W	32A	.0025 to .25	1.310 [33.3]	.551 [14]	.256 [6.5]	.040 [1] ⁴	.075 [1.9]
LOR5	5W	40A	.0025 to .25	1.670 [42.4]	.880 [22.35]	.320 [8.13]	.040 [1]	.100 [2.54]

¹ I = (P/R)^{1/2}, not to exceed max current rating (increased levels avail). ² Dim. C applies to Opt.4T ³ Specify opt.18 for .040 [1mm] lead dia ⁴ Specify opt.20 for .032 [0.8mm] lead dia

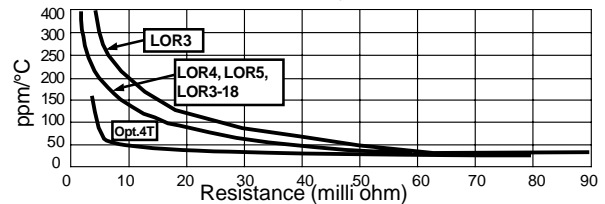
PERFORMANCE CHARACTERISTICS

Test Parameter	Performance, Typ.
Load Life	0.5% +5mΩ
Vibration	0.05% +5mΩ
Overload	5 Sec, 5X rated W (NTE Current Rating)
Temp. Coefficient	(per chart, 4wire conn. at body)
Temp. Range	-55° to +275°C
Dielectric Strength	1000 VAC
Insulation Res.	10,000MΩ min dry
Terminal Strength	10 lb. min.
Solderability	per Mil-STD-202, m.208
Inductance	non-inductive (3nH to 20nH typ)

POWER DERATING



TEMPERATURE COEFFICIENT (typ.)



APPLICATION NOTES:

- LOR3 & 4 parts have resistance measured at 1.31" [33.3mm], LOR5 at 1.67" [42.4mm]. Also available per customer requirement.
- 18AWG (.040" dia) leads are standard on LOR4 & 5 and available on LOR3 by specifying opt.18. RCD recommends .040" leads, since the heavier gauge results in lower lead resistance, improved heat transfer, and lower in-circuit TCR (.032" leadwires have resistivity of ~1mΩ/in., 0.04" dia. ~0.6mΩ/in). An extra inch of .032" leadwire in the circuit will increase the TC of a 10mΩ resistor by roughly 350ppm. Keep leadwires short for best TC stability.
- To achieve utmost precision in current sense or shunt applications, RCD offers LOR3 & LOR5 in 4-terminal version, specify opt.4T (eliminates lead resistance when utilized in Kelvin configuration). Request App. note #R31 for performance comparison of 2- vs. 4-terminal.

P/N DESIGNATION:

