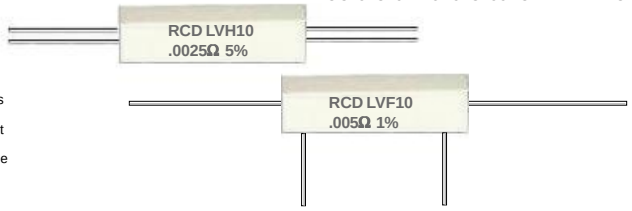
RESISTORS•CAPACITORS•COILS•DELAY LINES

PRECISION 4-TERMINAL RESISTORS, 2- TO 20-WATT CERAMIC ENCASED

LVF & LVH SERIES

RoHS Term.W is RoHS compliant & 260°C compatible



FEATURES:

- ☐ Industry's widest range of 4-terminal power resistors!
- ❒ Standard tolerances to 0.1%, TC's to 5ppm
- ❒ Welded & fireproof construction
- ❒ Available on exclusive ***SWIFT™*** delivery program!
- ❒ 4-terminal "Kelvin" design eliminates contributing error due to lead resistance
- ❒ Standard current ratings to 40A (up to 100A on custom basis)
- ☐ For surface mount design up to 3W see SF series

OPTIONS:

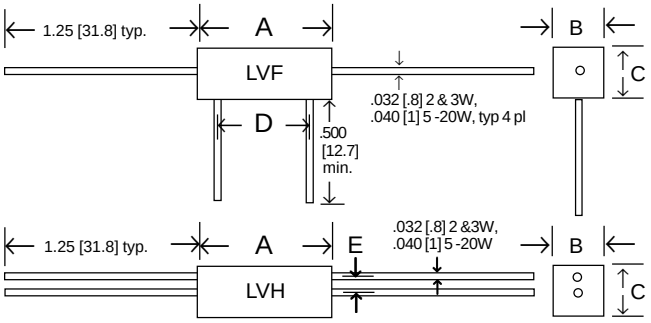
- ❒ Option X: Non-inductive design
- ❒ Option E: Low thermal EMF design
- ❒ Numerous other options available including custom marking, lead forming, lead diameter, burn-in, etc.

Four-Terminal Current Sensing as low as 0.0005Ω

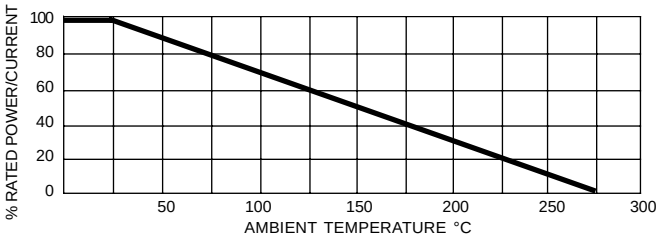
RCD's Series LVF resistors feature a 4-terminal "Kelvin" design to eliminate the effects of lead resistance. Precision resistive element is potted inside a ceramic case for excellent durability and environmental protection. Series LVF resistors are well-suited for current sensing applications including test instrumentation, power supplies, and power amplifiers. Specify option E when circuits require low thermal EMF.

TEMPERATURE COEFFICIENT

Resis. Range	Standard TC (ppm/°C, typ)	Optional TC
.0005 to .0049Ω	600 ppm	200, 100, 50
.005 to .0249Ω	200 ppm	100, 50, 30
.025 to .99Ω	100 ppm	50, 30, 20
1 to 9.9Ω	50 ppm	30, 20, 10
10Ω and up	30 ppm	20, 10, 5



DERATING:



RCD Type	Wattage Rating [1]	Max. Working Voltage [1,2]	Max. Current [1,3]	Resistance Range (Ω)	DIMENSIONS [Numbers in brackets are mm]				
					A ±.04 [1.0]	B ±.032 [.81]	C ±.032 [.8]	D (LVFonly) ±.12 [3]	E (LVH only) ±.032 [.8]
LVF2S, LVH2S	2	100V	15A	.0005 - 10K	.59 [15]	.25 [6.35]	.25 [6.35]	.45 [11.43]	.075 [1.9]
LVF2, LVH2	2	100V	20A	.0005 - 15K	.70 [17.58]	.27 [6.8]	.27 [6.8]	.50 [12.7]	.075 [1.9]
LVF3, LVH3	3	150V	25A	.001 - 25K	.88 [22.4]	.31 [7.9]	.31 [7.9]	.56 [14.2]	.10 [2.54]
LVF5, LVH5	5	200V	30A	.001 - 30K	.88 [22.4]	.38 [9.7]	.35 [8.9]	.56 [14.2]	.10 [2.54]
LVF7, LVH7	7	350V	35A	.001 - 50K	1.42 [36] Max	.38 [9.7]	.35 [8.9]	1.00 [25.4]	.10 [2.54]
LVF10, LVH10	10	500V	40A	.001 - 100K	1.96 [50] Max	.38 [9.7]	.38 [9.7]	1.38 [35.0]	.10 [2.54]
LVF15, LVH15	15	540V	40A	.001 - 100K	1.96 [50] Max	.50 [12.7]	.50 [12.7]	1.38 [35.0]	.125 [3.17]
LV20F, LVH20	20	600V	40A	.002 - 200K	2.55 [65] Max	.50 [12.7]	.50 [12.7]	2.00 [50.8]	.125 [3.17]

[1] Consult factory for increased ratings [2] Working Voltage = $(PR)^{1/2}$, voltage not to exceed the maximum value listed [3] Units not to exceed wattage, current, or voltage rating, whichever is less

P/N DESIGNATION:

LVF5 ☐ - R005 - J B ☐ W

RCD Type

Option: X, E (Leave blank if standard)

Resis. Code 0.1%-1% tol. use 3 signif. digits & multiplier, R010=.01Ω, R100=.1Ω, 1R00=1Ω, 10R0=10Ω, 1000=100Ω,1001=1K. 2%-10% use 2 digits &multiplier, e.g. R01=0.01Ω, R10= 0.1Ω, 1R0=1Ω, 100=10Ω, 101=100Ω, 102=1K, etc. Use extra digits as necess: R005, R0025, R0075, R012

Tolerance: K=10%, J=5%, H=3%, G=2%, F=1%, D=0.5%, C=0.25%,B=0.1%

Packaging: B = Bulk (standard)

Optional TC: (leave blank if standard): 5= 5ppm, 10= 10ppm, 20= 20ppm, 30= 30ppm, 50=50ppm, 101= 100ppm, 201= 200ppm

Termination: W= Lead-free, Q= Tin/Lead (leave blank if either is acceptable)

SUGGESTED MOUNTING



Bend leads approximately 1/8" from body. If operating at or near rated power, standoffs are suggested to prevent overheating of the PCB. Utilize heavy duty copper traces adequate for intended current levels.