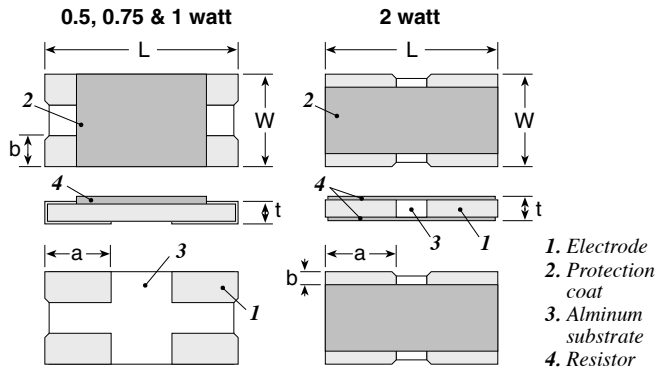


LVK Series

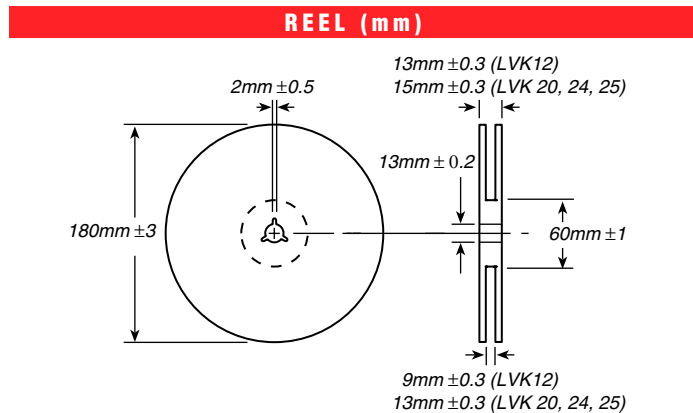
Four Terminal High Precision Current Sense



Series	Pkg. Size	Power Rating (W @70°C)	Resistance Range (Ω)	TCR (ppm/°C)	Tolerance	Available Values
LVK12	1206	0.5W	0.01-0.50	50ppm	0.5%, 1%	E12
LVK20	2010	0.75W	0.01-0.50	50ppm	0.5%, 1%	E12
LVK24	2412	1.0W	0.01-0.50	50ppm	0.5%, 1%	E12
LVK25	1224	2.0W	0.001	300ppm	1%	1, 2, 3, 4,
			0.002-0.004	200ppm		5, 6, 7, 8,
			0.005-0.01	100ppm		9, 10 mΩ

DIMENSIONS (mm)					
Size	L	W	t	a	b
LVK12 (1206)	3.2 ±0.2	1.6 ±0.2	0.5 ±0.15	1.0 ±0.2	0.55 ±0.2
LVK20 (2010)	5.0 ±0.2	2.5 ±0.2	0.5 ±0.15	1.7 ±0.2	0.9 ±0.2
LVK24 (2412)	6.4 ±0.2	3.2 ±0.2	0.5 ±0.15	2.1 ±0.2	1.2 ±0.2
LVK25 (1224)	3.2 ±0.2	6.4 ±0.2	0.5 ±0.2	0.4 ±0.2	2.7 ±0.2

LAND PATTERN (mm)						
Series	L	W	A	B	C	D
LVK12	8.0	3.5	1.0	0.3	4.5	2.5
LVK20	12.0	5.5	1.4	0.5	6.5	3.6
LVK24	15.0	7.0	2.0	0.6	8.5	4.4
LVK25	20.0	20.0	2.2	1.0	5.0	7.6



Current sense resistors enable the measurement of current flow in a circuit by monitoring a voltage drop across a precisely calibrated resistance. The LVK chip features four terminals, also known as a "Kelvin" configuration. This configuration enables current to be applied through two opposite terminals and a sensing voltage to be measured across the other two terminals, eliminating the resistance and temperature coefficient of the terminals for a more accurate current measurement.

Isolating the voltage and current terminals (see schematic) facilitates a very accurate current measurement. Ohmite's proprietary technology offers an excellent Temperature Coefficient of Resistance (TCR) even for very low resistance values. The resistive element consists of a durable, anti-corrosive metal alloy that combines reliable performance with the ability to withstand harsh environments.

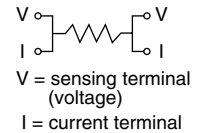
FEATURES

- Designed for automatic insertion
- Industry standard sizes
- High-precision kelvin connect capability in a small package

SPECIFICATIONS

- Resistance Range:** 0.001Ω - 0.05Ω
- Operating Temperature Range:** -40°C to +125°C
- Rated Ambient Temperature:** +70°C
- Resistance Tolerance:** 0.5% and 1% standard
- Temperature Coefficient:** LVK12, LVK20, LVK24: 50ppm standard
LVK25: 100ppm, 200ppm, or 300ppm based on resistance value
- Terminals:** 100% matte tin

SCHEMATIC



ORDERING INFORMATION

RoHS Compliant

LVK25R005FER

Series	Case Size	Ohms	Tolerance	Taping Code
12 = 1206	20 = 2010	R005 = 0.005	D = 0.5% F = 1%	R = 1,000 pc/reel
24 = 2412	25 = 1224			

Check product availability at www.ohmite.com

STANDARD VALUES			
LVK12	LVK20	LVK24	LVK25
1% Tolerance			
0.01	0.01	0.01	0.001
0.012		0.012	0.002
		0.015	0.003
			0.005
0.02	0.02	0.02	
0.024	0.027		
0.03	0.03	0.03	0.01
		0.039	
		0.039	
0.047		0.047	
0.05	0.05	0.05	
0.5% Tolerance			
0.01	0.01	0.01	
0.02	0.02	0.02	
0.03	0.03	0.03	
0.05	0.05	0.05	