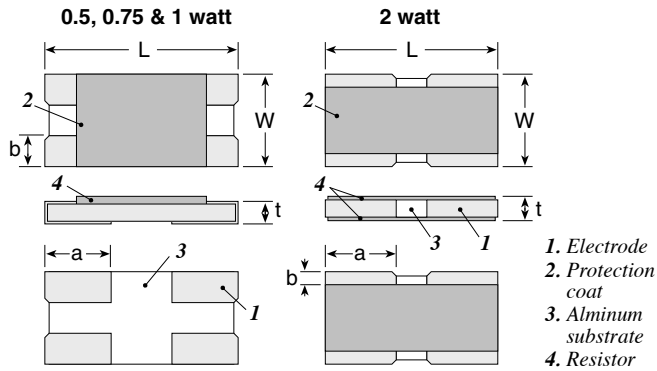


LVK Series

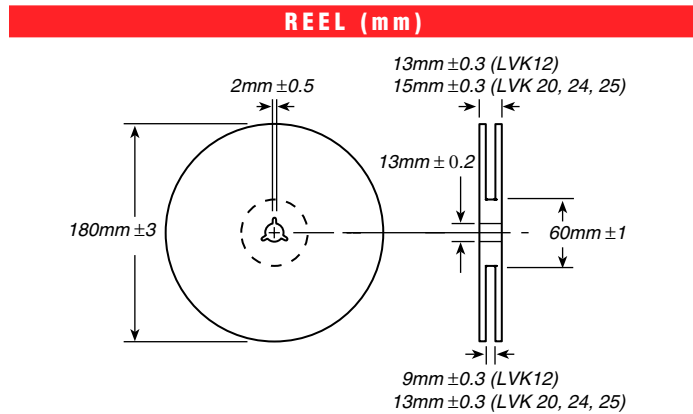
Four Terminal High Precision Current Sense



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	A	W	B		
LVK12	1.0	2.2	1.1	0.5		
LVK20	3.4	2.6	1.8	0.7		
LVK24	4.2	2.2	2.4	0.8		
LVK25	5.4	1.0	2.4	2.2		



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.

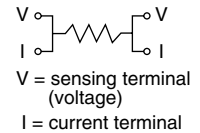
FEATURES

- 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		