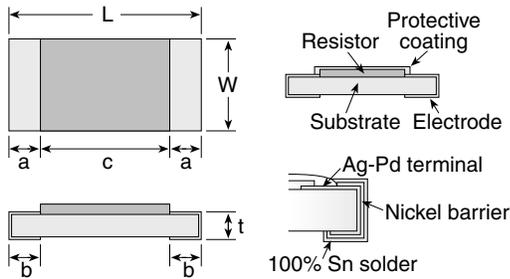


# LVC Series

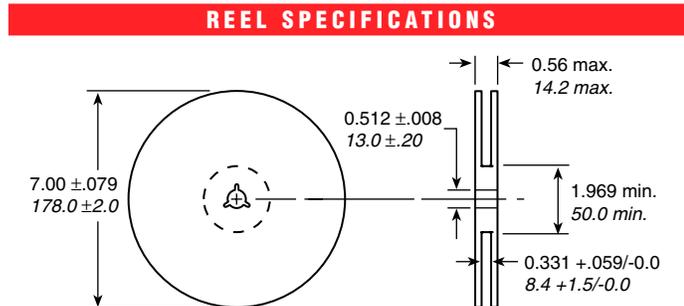
## Low Value Thick Film Chip



Series	Power Rating (W @70°C)	Resistance Range (Ω)	TCR (ppm/°C)	Tolerance	Available Values
LVC06	0.25W	0.010-0.030	0 ±500ppm	1%	E12
		0.033-0.050	0 ±200ppm	1%	E12
		0.056-0.068	0 ±100ppm	1%	E12
		0.100-0.976	0 ±200ppm	1%, 5%	E24, E96
LVC20	0.5W	0.010-0.030	0 ±500ppm	1%	E12
		0.033-0.068	0 ±200ppm	1%	E12
		0.100-0.976	0 ±100ppm	1%, 5%	E24, E96
LVC25	1.0W	0.010-0.030	0 ±500ppm	1%	E12
		0.033-0.068	0 ±200ppm	1%	E12
		0.100-0.976	0 ±100ppm	1%, 5%	E24, E96

DIMENSIONS (in.)						
Size	L	W	t	a	b	c
<b>LVC06</b> (EIA size 1206)	<b>0.126</b> +0.002 -0.008	<b>0.063</b> +0.002 -0.006	<b>0.02</b> +0.004 -0.004	<b>0.02</b> +0.010 -0.010	<b>0.02</b> +0.012 -0.012	<b>0.09</b>
<b>LVC20</b> (EIA size 2010)	<b>0.197</b> +0.008 -0.008	<b>0.098</b> +0.006 -0.006	<b>0.024</b> +0.004 -0.004	<b>0.024</b> +0.008 -0.008	<b>0.020</b> +0.012 -0.012	<b>0.15</b>
<b>LVC25</b> (EIA size 2512)	<b>0.25</b> +0.008 -0.008	<b>0.13</b> +0.008 -0.008	<b>0.02</b> +0.004 -0.004	<b>0.03</b> +0.008 -0.008	<b>0.03</b> +0.008 -0.008	<b>0.20</b>

LAND PATTERN (in.)				
Land pattern dimensions are for reference only				
Size	M	N	O	L
<b>LVC06</b>	0.146	0.040	0.080	0.066
<b>LVC20</b>	0.229	0.056	0.120	0.117
<b>LVC25</b>	0.288	0.068	0.150	0.152



**Our friendly Customer Service team can be reached at 866-9-OHMITE**

Ohmite's LVC Series low value chip resistors are ideal for today's current sense applications requiring low profile, low cost solutions. Available in 0.25, 0.5, and 1 watt sizes, footprints are 1206, 2010, and 2512 size respectively. These resistors are offered in ohmic ranges from 0.05 ohm to 10hm in standard ±5% E24 values, 1% tolerance available on request.

The LVC Series resistors are well suited for a variety of industrial and commercial applications.

## FEATURES

- Industry Standard Sizes
- Terminal Barrier Resists Ag Migration
- Working Temperature Range is from -55°C to +125°C
- Designed for Automatic Insertion

## APPLICATIONS

- Switching Power Supplies
- Cellular
- Telecom and Wireless
- Computer
- RF

## SPECIFICATIONS

### Material

**Substrate:** Alumina  
**Resistor:** Thick Film  
**Coating:** Glass

PERFORMANCE DATA		
Load Life	1000 Hrs 70°C	ΔR ± (3.0% + 0.01) Ω
Humidity	1000 Hrs 60°C 90-95% RH	ΔR ± (2.0% + 0.01) Ω
Temperature Cycle	5 Cycles -55°C to +125°C	ΔR ± (1.0% + 0.01) Ω
High Temp Operation	1000 Hrs 125°C	ΔR ± (1.0% + 0.01) Ω
Low Temp Operation	1000 Hrs -55°C	ΔR ± (1.0% + 0.01) Ω
Short Time Overload	5 Sec. 2.5 x Rated Power	ΔR ± (2.0% + 0.01) Ω
Effects of Solder Heat	10 Sec. 260°C	ΔR ± (1.0% + 0.01) Ω
Derating	100% @ 70°C, Derates Linearly to Zero @ 125°C	

ELECTRICAL			
Electrical	LVC06 1206	LVC20 2010	LVC25 2512
<b>Rated Power Watts</b>	0.25	0.50	1.0
<b>Temperature Coefficient ppm/°C</b>			
Resistance	0.05 - 0.09	N/A	350
Range (Ω)	0.10 - 0.18	200	100
	0.20 - 1.0	100	100
<b>Max. Working Volts</b>	V = √PR (P = Rated Watts, R = Resistance Value)		
<b>Resistance Tolerance</b>	±1% (for values ≥0.1Ω: ±1% and ±5%; see below)		
<b>Quantity Per Reel</b>	5,000	4,000	4,000

Ohm range	Tol.	Available Ohm Values
<b>0.01 to 0.068</b>	1%	0.01, 0.012, 0.015, 0.018, 0.02, 0.022, 0.024, 0.027, 0.025, 0.03, 0.033, 0.039, 0.04, 0.047, 0.05, 0.056, 0.06, 0.068
<b>0.1 to 0.976</b>	1%	0.1, 0.102, 0.105, 0.107, 0.11, 0.12, 0.113, 0.115, 0.118, 0.121, 0.124, 0.127, 0.13, 0.133, 0.137, 0.14, 0.143, 0.147, 0.15, 0.154, 0.158, 0.16, 0.162, 0.165, 0.169, 0.174, 0.178, 0.18, 0.182, 0.187, 0.191, 0.196, 0.2, 0.205, 0.21, 0.215, 0.221, 0.226, 0.232, 0.237, 0.243, 0.249, 0.255, 0.261, 0.267, 0.27, 0.274, 0.28, 0.287, 0.294, 0.3, 0.301, 0.309, 0.316, 0.324, 0.33, 0.332, 0.34, 0.348, 0.357, 0.36, 0.365, 0.374, 0.383, 0.39, 0.392, 0.402, 0.412, 0.422, 0.43, 0.432, 0.442, 0.453, 0.464, 0.47, 0.475, 0.487, 0.499, 0.51, 0.511, 0.523, 0.536, 0.549, 0.56, 0.562, 0.576, 0.59, 0.604, 0.619, 0.62, 0.634, 0.649, 0.665, 0.68, 0.681, 0.698, 0.715, 0.732, 0.75, 0.768, 0.787, 0.806, 0.82, 0.825, 0.845, 0.866, 0.887, 0.909, 0.91, 0.931, 0.953, 0.976
	5%	0.1, 0.11, 0.12, 0.13, 0.15, 0.16, 0.18, 0.20, 0.22, 0.24, 0.27, 0.3, 0.33, 0.36, 0.39, 0.43, 0.47, 0.51, 0.56, 0.62, 0.68, 0.75, 0.82, 0.91

**ORDERING INFORMATION**

RoHS Compliant

**LVC06JR249EV**

<b>Low Value Chip Series</b>	<b>Case Size</b>	<b>Tolerance</b>	<b>Ohms</b>	<b>Taping Code</b>
06 = 1206	L = 1206	F = 1%	R249 = 0.249	blank = bulk package
20 = 2010		J = 5%	1R00 = 1.0	V = reel taped
25 = 2512				

Check product availability at [www.ohmite.com](http://www.ohmite.com)