



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# LVC Series

## Low Value Chip



Ohmite's LVC Series low value chip resistors are ideal for today's current sense applications requiring low profile, low cost solutions. Available in 0.5, 0.75, and 1 watt sizes, footprints are 1206, 2010, and 2512 size respectively. These resistors are offered in ohmic ranges from 0.10 to 4.7 ohms in standard 1% and 2% in E12 values depending on value.

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

### APPLICATIONS

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

### FEATURES

- Industry Standard Sizes
- Terminal Barrier Resists Ag Migration
- Working Temperature Range is from -40°C to +125°C
- Designed for Automatic Insertion

### SERIES SPECIFICATIONS

Series	Power Rating	Max. Current	Resistance Range*	TCR ppm/°C	Resistance Tolerance
LVC06	0.5W	32A	10m-15m	500	10mΩ ~ 22mΩ 2%
			18m-27m	350	27mΩ ~ 4.7Ω 1%
			33m-47m	200	
			50m- 4.7	100	
LVC20	0.75W	40A	10m-15m	500	
			18m-27m	350	
			33m-47m	200	
			50m- 4.7	100	
LVC25	1.0W	45A	10m-15m	500	
			18m-27m	350	
			33m-47m	200	
			50m- 4.7	100	

\* E-12 values and 20, 25, 50

### CHARACTERISTICS

<b>Substrate</b>	Alumina 96%
<b>Resistor</b>	Thick Film, Ni-Cr Alloy
<b>Electrode</b>	Sn, Ni, Cu
<b>Coating</b>	Epoxy resin
<b>Max. Working Volts</b>	$V = \sqrt{PR}$ (P = Rated Watts, R = Resistance Value)
<b>Derating</b>	100% @ 70°C, Derates Linearly to Zero @ 125°C
<b>Operating temp. range</b>	-40°C ~ +125°C
<b>Soldering</b>	The recommended soldering condition for both reflow and wave soldering is as follows: Preheating: 150° ~ 180°C 60 ~ 120 sec. Soldering: min. 230°C 30 ~ 40 sec. Max. temp.: max. 260°C max. 10 sec.

### PERFORMANCE DATA

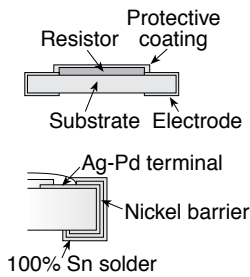
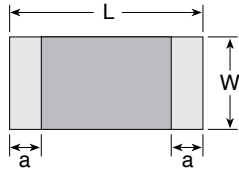
<b>Moisture resistance</b>	60°C±2°C, 90%~95% RH, Rated voltage 1.5h ON, 0.5h OFF, 1000h	±(0.5%+0.0005Ω)
<b>Temperature Cycle</b>	-40°C (30min.)/+125°C (30min.), 5 cycles	±(0.5%+0.0005Ω)
<b>Short Time Overload</b>	Rated voltage x 2.5 for 5s	±(0.5%+0.0005Ω)
<b>Endurance</b>	70°C±3°C, Rated voltage 1.5h ON, 0.5h OFF, 1000h	±(0.5%+0.0005Ω)
<b>Resistance to Solder Heat</b>	260°C±5°C for 10±1s	±(0.5%+0.0005Ω)
<b>Terminal strength</b>	Bending width: 2mm for 10s±1s, Glass epoxy substrate with thickness of 1.6mm	±(0.5%+0.0005Ω)
<b>Solderability</b>	245°C±5°C for 3s±0.5s	Min. 90% coverage
<b>Max. Overload Current</b>	(A) Time applied: max. 10msec Interval: min. 60sec	LVC06 $I = \sqrt{(32/R)}$ LVC20 $I = \sqrt{(50/R)}$ LVC25 $I = \sqrt{(64/R)}$

# LVC Series

## Low Value Chip

### DIMENSIONS

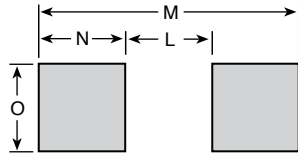
(mm)



Size	L ±0.2	W ±0.2	t ±0.15	a ±0.15
LVC06 (EIA size 1206)	3.2	1.6	0.5	1.0
LVC20 (EIA size 2010)	5.0	2.5	0.5	1.7
LVC25 (EIA size 2512)	6.4	3.2	0.5	2.0

### Land Pattern

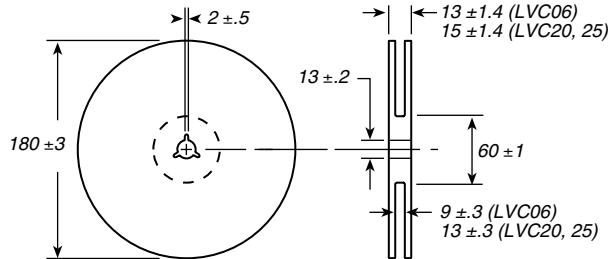
Land pattern dimensions are for reference only



Size	M	N	O	L
LVC06	0.146	0.040	0.080	0.066
LVC20	0.229	0.056	0.120	0.117
LVC25	0.288	0.068	0.150	0.152

### REEL SPECIFICATIONS

5,000 pc/reel



### ORDERING INFORMATION

RoHS Compliant

**LVC06FR560EV**

Low Value Chip Series	Case Size	Tolerance	Ohms	Taping Code
06 = 1206	06 = 1206	F = 1%	R249 = 0.249	blank = bulk package
20 = 2010	20 = 2010	G = 2%	1R00 = 1.0	V = reel taped
25 = 2512	25 = 2512			

Ohm range	Tol.	Available Ohm Values
0.027 ~ 4.7	1%	0.027, 0.033, 0.039, 0.047, 0.050, 0.056, 0.068, 0.082, 0.10, 0.12, 0.15, 0.18, 0.20, 0.22, 0.25, 0.27, 0.33, 0.39, 0.47, 0.50, 0.56, 0.68, 0.82, 1.0, 1.2, 1.5, 1.8, 2.0, 2.2, 2.5, 2.7, 3.3, 3.9, 4.7
0.010 ~ 0.022	2%	0.010, 0.012, 0.015, 0.018, 0.020, 0.022

*Only E12 values plus 20, 25, 50*