

## MULTILAYER CHIP VARISTORS [ CVL Series ]

The capacitance of multilayer chip varistors, CVL series, is low enough to minimize the deterioration of signal waveforms even if they are put in high-speed data lines. They are ideal for protection from static electricity of high-speed signal lines of AV equipment, etc.

### ■ Features

- The low capacitance permits the use for protection of USB2.0 and other high-speed signal lines from static electricity.
- Conforming to the ESD test standard, IEC-61000-4-2 LEVEL4 (8kV)
- Highly reliable termination with Ni+Sn barrier.
- Lead-free
- RoHS Compliant.

### ■ Applications

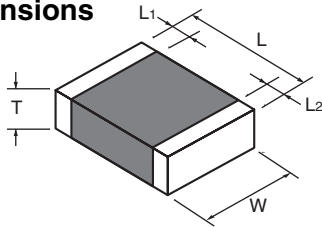
Protection of cellular phones, laptops, and other portable electronic equipment from electrostatic surge.  
Protection of high-speed signal lines of AV equipment, etc. from electrostatic surge.



### ■ Part Number System

<b>CVL</b>	<b>05</b>	<b>C</b>	<b>270</b>	<b>M</b>	<b>030</b>	<b>-T(B)</b>	<b>P</b>
Series	Style	Capacitance C : Low capacitance	Varistor voltage 270 : 27V	Varistor voltage tolerance M : ±20%	Capacitance 030 : 3pF	Packing form T : Taping B : Bulk	Termination P : Ni/Sn barrier

### ■ Dimensions



Unit : mm

Type	EIA Symbol	L	W	T	L1 • L2
CVL05	0402	1.0±0.1	0.5±0.1	0.5±0.1	Min 0.2
CVL10	0603	1.6±0.2	0.8±0.2	0.8±0.2	0.3±0.2

### ■ Part Number List • Specifications

Part number	Maximum rating					Maximum clamping voltage		Varistor voltage	Capacitance
	Maximum allowable voltage		Maximum peak current	Maximum energy	ESD surge tolerance	(A)	(V)	V1mA	
	AC.(Vrms)	DC.(V)	8/20 μs(A)	(J)					IEC61000-4-2(kV) contact discharge
CVL05C550M010	7	10	1	0.005	8	1	190	55	1
CVL05C270M030	7	10	1	0.005	8	1	100	27	3
CVL05C270M150	7	10	1	0.005	8	1	90	27	15
CVL10C550M010	7	10	1	0.005	8	1	190	55	1
CVL10C270M030	7	10	1	0.005	8	1	100	27	3
CVL10C270M150	7	10	1	0.005	8	1	90	27	15

### ■ Application Examples of CVL Series

Part number	Capacitance	Example of application	
		Transmission method	Transmission speed
CVL□□C550M010	1pF	DVI HDMI	1.65Gbps 1.65Gbps
CVL□□C270M030	3pF	IEEE1394 LVDS	800Mbps 1.12Gbps
CVL□□C270M150	15pF	Ethernet USB2.0	10M,100Mbps 480Mbps

### ■ Insertion Loss Characteristics

