

# EPCOS CeraDiodes



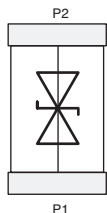
This product is RoHS compliant.



Epcos Varistors

DIMENSIONS: in. (mm)

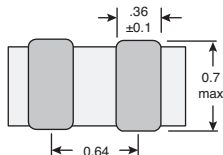
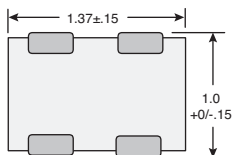
A



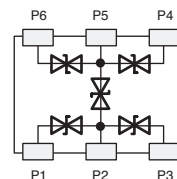
P1 = GND  
P2 = I/O Line

Due to the symmetrical configuration, no marking information is needed. P1 and P2 can be interchanged.

B



C



P1 = I/O Line 1  
P2 = GND  
P3 = I/O Line 2  
P4 = I/O Line 3  
P5 = VDC  
P6 = I/O Line 4

Due to the symmetrical configuration, no marking information is needed. P2 and P5 can be interchanged.



## RELIABLE ESD PROTECTION

CeraDiodes are ceramic semiconductors optimized specifically for high performance in ESD applications. They have a non-linear voltage/current characteristic for effectively suppressing extremely fast voltage transients and offer superior parametric stability over the complete operating range of -40°C to +85°C.

CeraDiodes are bi-directional devices. A single CeraDiode connected from signal/data line to ground routes both positive and negative ESD transitions safely to the ground plane. This technique eliminates the need to route ESD charge into the power plane, possibly damaging nearby integrated circuits. CeraDiodes for high-speed lines exhibits a very low capacitance designed for maximum ESD protection combined with minimal signal distortion.

### Features:

- Bi-directional ESD protection to IEC 61000-4-2 (level 4)
- Suitable for uni- and bi-directional lines
- Bi-directional ESD protection in a two-pin line
- Routes all ESD events, both positive and negative, safely to ground
- USB 2.0 compliant
- Extremely fast response time < 0.5ns
- Lead-free nickel barrier terminations suitable for lead-free soldering
- RoHS-compatible

### Applications:

- Interfaces (e.g. audio and video, USB, IEEE 1394, Ethernet, DVI)
- EDP products (e.g. desktop and notebook computers)
- Peripherals (e.g. printers, memory cards, etc.)
- Portable handheld products (e.g. PDA)
- Mobile communication
- Consumer products (Flat TVs, set top boxes, MP3 players, digital cameras, etc.)
- Liquid crystal displays (LCD) / monitors

### Note:

CeraDiodes are not suitable for switching applications or for voltage stabilization, where static power dissipation is required.



RoHS Compliant

### Standard Single Line Ceradiodes

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Epcos Part No.	Fig.	Series / Type	Case Size	Working Voltage (VDC max.)	Peak Pulse Current @ 8/20 μs (A)	Peak Pulse Power @ 8/20 μs (W)	Price Each			
								1	50	100	1000
<a href="#">871-B72590D50A60</a>	B72590D50A60	A	CDS2C05GTA	0402	5.6	10	320	.73	.57	.30	.14
<a href="#">871-B72590D150A60</a>	B72590D150A60	A	CDS2C15GTA	0402	15	10	670	.16	.14	.13	.10
<a href="#">871-B72500D50A60</a>	B72500D50A60	A	CDS3C05GTA	0603	5.6	30	1000	.54	.37	.259	.133
<a href="#">871-B72500D90A60</a>	B72500D90A60	A	CDS3C09GTA	0603	9	30	1600	.54	.43	.26	.12
<a href="#">871-B72500D150A60</a>	B72500D150A60	A	CDS3C15GTA	0603	15	30	2000	.54	.37	.26	.12
<a href="#">871-B72570D120A60</a>	B72570D120A60	A	CDS4C12GTA	1003	12	20	1000	.67	.50	.32	.16

### High Speed Single Line Ceradiodes

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Epcos Part No.	Fig.	Series / Type	Case Size	Working Voltage (VDC max.)	Breakdown Voltage (VDC)	Clamping Voltage (VDC)	Price Each			
								1	50	100	1000
<a href="#">871-B72590D160H60</a>	B72590D160H60	A	CDS2C16GTH	0402	16	65	290	.73	.55	.30	.14
<a href="#">871-B72500D160H60</a>	B72500D160H60	A	CDS3C16GTH	0603	16	65	290	.56	.40	.27	.13
<a href="#">871-B72500D300H60</a>	B72500D300H60	A	CDS3C30GTH	0603	30	50	120	.53	.38	.25	.13

### Arrays

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Epcos Part No.	Fig.	Series / Type	Case Size	Number of Elements	Working Voltage (VDC max.)	Clamping Voltage (VDC)	Price Each			
								1	50	100	1000
<a href="#">871-B72735D50H62</a>	B72735D50H62	B	CDA6C05GTH	1012	3	5.6	195	.53	.50	.47	.32
<a href="#">871-B72724D160H62</a>	B72724D160H62	C	CDA5C16GTH	0612	4	16	350	.39	.28	.253	.203