

# EPCOS CeraDiodes



This product is RoHS compliant.



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.

**D**

P1 = GND  
P2 = GND  
P3 = GND  
P4 = GND  
P5 = I/O Line 1  
P6 = I/O Line 2  
P7 = I/O Line 3  
P8 = I/O Line 4

Due to the symmetrical configuration, no marking information is needed. P1 & P8, P2 & P7, P3 & P6, P4 & P5 can be interchanged.

Varistors

Epcos

## EPCOS 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 < 0.5 ns
- 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 of 2000 and up, 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 |
| 871-B72590D50A60    | B72590D50A60    | A    | CDS2C05GTA    | 0402      | 5.6                        | 10                               | 320                            |            |    |     |      |
| 871-B72590D150A60   | B72590D150A60   | A    | CDS2C15GTA    | 0402      | 15                         | 10                               | 670                            |            |    |     |      |
| 871-B72500D50A60    | B72500D50A60    | A    | CDS3C05GTA    | 0603      | 5.6                        | 30                               | 1000                           |            |    |     |      |
| 871-B72500D90A60    | B72500D90A60    | A    | CDS3C09GTA    | 0603      | 9                          | 30                               | 1600                           |            |    |     |      |
| 871-B72500D150A60   | B72500D150A60   | A    | CDS3C15GTA    | 0603      | 15                         | 30                               | 2000                           |            |    |     |      |
| 871-B72500D200A60V7 | B72500D200A60V7 | A    | CDS3C20GTA    | 0603      | 22                         | 30                               | 2200                           |            |    |     |      |
| 871-B72570D120A60   | B72570D120A60   | A    | CDS4C12GTA    | 1003      | 12                         | 20                               | 1000                           |            |    |     |      |

### High Speed Single Line Ceradiodes

For quantities of 2000 and up, 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 |
| 871-B72590D160H60 | B72590D160H60  | A    | CDS2C16GTH    | 0402      | 16                         | 65                      | 290                    |            |    |     |      |
| 871-B72500D160H60 | B72500D160H60  | A    | CDS3C16GTH    | 0603      | 16                         | 65                      | 290                    |            |    |     |      |
| 871-B72500D300H60 | B72500D300H60  | A    | CDS3C30GTH    | 0603      | 30                         | 50                      | 120                    |            |    |     |      |

### Arrays

For quantities of 2000 and up, 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 |
| 871-B72735D50H62  | B72735D50H62   | B    | CDA6C05GTH    | 1012      | 3                  | 5.6                        | 195                    |            |    |     |      |
| 871-B72724D160H62 | B72724D160H62  | C    | CDA5C16GTH    | 0612      | 4                  | 16                         | 350                    |            |    |     |      |
| 871-B72714D160H60 | B72714D160H60  | D    | CA04P2S17LTCG | 0405      | 2                  | 22                         | 50                     |            |    |     |      |