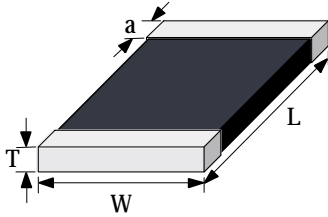


## ESD、EFT、Surge Suppressor & EMI/RFI Filter

### 0402 H Series



Dimensions



| SYMBOL | INCHES |       | MILLIMETERS |      |
|--------|--------|-------|-------------|------|
|        | MIN    | MAX   | MIN         | MAX  |
| Tmax.  | -      | 0.024 | -           | 0.60 |
| a      | 0.004  | 0.016 | 0.10        | 0.40 |
| L      | 0.035  | 0.043 | 0.90        | 1.10 |
| W      | 0.016  | 0.024 | 0.40        | 0.60 |

### Features

- As JumboTek's electrical advantages and physical Advantages <For More> 2005.12.22
- Bidirectional clamping in a two pin device
- No polarity, suitable for uni- and bidirectional lines
- Low capacitance
- Low clamping voltage compared to typical MLV ESD devices
- Capable of withstanding numerous ESD strikes
- RoHS compliant

### Application examples

- USB 2.0 and IEEE 1394
- DVI and HDMI interfaces
- HDTV
- High speed Ethernet
- PHS
- GPS
- Blue Tooth,PDA,DSC
- Antennas
- Printer ports
- Cellular phones

### Specifications

- Packaging  
Tape and Reel  
T 7 inch reel (10,000 pcs.)
- Material  
Body: Semiconducting Ceramic  
Terminals: Ni/Sn plated (code "P" )
- Operating Temperature  
-40 to +85°C (without derating)
- Solderability  
260°C 2 sec (IEC 60068-2-58)
- Soldering Heat Resistance  
260°C 5 sec. (IEC 60068-2-58)
- Response Time  
<0.5ns
- Temperature coefficient( $\alpha V$ ) of clamping voltage (Vc) @ specified test current  
<0.01%/ °C
- Power dissipation  
0.05W max.
- Withstand ESD durability test severity of IEC 61000-4-2 Level 4 :  
Contact discharge mode ; typical 8KV,max 20KV  
Air discharge mode ; typical 15KV,max 30KV

#### Standards

- IEC 61000-4-2
- IEC 61000-4-3
- IEC 61000-4-4

| Type           | Maximum Ratings (125°C)  |  | Specifications (25°C)   |  |   |
|----------------|--|--|---|--|---|
|                | Allowable continuous working voltage<br>V <sub>DC</sub><br>(V) | Breakdown voltage at 1mA(DC) test current<br>V <sub>N(DC)Min.</sub><br>(V) | Max. clamping voltage at spec. current (8/20 μs)<br>V <sub>C</sub><br>(V@A) | Typ. Capacitance 1MHz<br>C <sub>typ.</sub><br>(pF) | Typical Inductance<br>L <sub>typ.</sub><br>(nH) |
| PD02S180H300PT | 2~18   | 22.0   | 50@ 1   | 30   | 0.8   |
| PD02S180H200PT | 2~18   | 22.0   | 50@ 1   | 20   | 0.8   |
| PD02S180H100PT | 2~18   | 22.0   | 55@ 1   | 10   | 0.8   |
| PD02S180H030PT | 2~18   | 45.0   | 110@ 1  | 3  | 0.8   |
| PD02S180H020PT | 2~18   | 74.0   | 165@ 1  | 2  | 0.8   |
| PD02S180H050PT | 2~18   | 45.0   | 100@ 1  | 5  | 0.8   |
| PD02S050H030PT | 2~ 5   | 135.0  | 250@ 1  | 3  | 0.8   |
| PD02S180H010PT | 2~18   | 320.0  | --  | 1  | 0.8   |

### How to order

| PD                     | 02                       | S           | 180   | H                                       | 300   | P   | T                                       |
|------------------------|--------------------------|-------------|---|---|---|---|---|
| Type code<br>PolyDiode | Chip Size<br>02= EIA0402 | Single Chip | Allowable Working voltage<br>180= 2~18 VDC<br>050= 2~ 5 VDC | H<br>High-speed signal line application | Capacitance Code<br>300= 30×10 <sup>0</sup><br>050= 5×10 <sup>0</sup> | Termination Code<br>P: Electroplating<br>by Ni/Sn | Packing Code<br>T: Tape&Reel<br>B: Bulk |

Specifications are subject to change without notice