

PolyDiode 0603 SMD H Series

ESD Protection of High Speed Signal Lines

Specifications

Packaging

Tape and Reel

T 7 inch reel
0603 (4,000 pcs.)

Material

Body: Semiconducting Ceramic
Terminals: Ni/Sn plated (code "P")

Operating Temperature

-55 to +125°C

Solderability

acc. to IEC 60068-2-58
235°C, 2 sec.

Soldering Heat Resistance

260°C, 10 sec. (IEC 60068-2-58)

280°C, 5 sec. (IEC 60068-2-58)

Response Time

<0.5ns

Temperature coefficient (αV) of clamping voltage (V_c) @ specified test current

<0.01%/°C

Power dissipation

0.05W max.

Standards

IEC 61000-4-2

IEC 61000-4-3

IEC 61000-4-4

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

WebLinks

Further infos see:

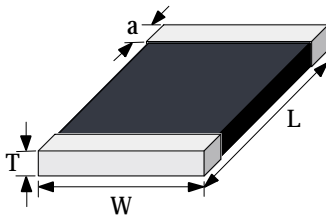
www.jumbotek.com

Further technical infos

Please E-mail: service@jumbotek.com



Dimensions



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
T _{max.}	-	0.035	-	0.90
a	0.008	0.020	0.20	0.50
L	0.057	0.069	1.45	1.75
W	0.026	0.037	0.65	0.95

Type	Maximum Ratings (125°C)			Specifications (25°C)			
	max. cont. working voltage $V_{M(Dc)}$ (V)	max. clamping voltage at 1A (8/20 μ s) (note1) V_c (V)	max. non-repetitive surge current (8/20 μ s) I_{TM} (A)	Nominal voltage at 1mA (DC) test current $V_{N(DC)min.}$ (V) $V_{N(DC)max.}$ (V)		typ. capacitance 1MHz (note2) C (pF)	max. inductance $L_{typ.}$ (nH)
PD03S050H030PT	5.0	250	-	135	165	3	1.0
PD03S050H050PT	5.0	100	-	45	60	5	1.0
PD03S180H060PT	18.0	50	-	22.0	32.0	6	1.0
PD03S180H100PT	18.0	50	-	22.0	32.0	10	1.0
PD03S180H200PT	18.0	50	-	22.0	32.0	20	1.0
PD03S180H300PT	18.0	50	-	22.0	32.0	30	1.0

Note 1: Maximum ESD clamp voltage tested with IEC 61000-4-2 Human Body Model discharge test circuit and direct discharge to device terminals (IEC preferred test method)

Note 2: Capacitance may be customized, please contact JumboTek for availability

How to order

PD	03	S	050	H	030	P	T
Type code PolyDiode	Chip Size 02= EIA0402 03= EIA0603	Single Chip	Working voltage 050= 5 V or less 180=18V or less	High-speed signal line application	Capacitance Code 030= 3×10^0 050= 5×10^0 100= 10×10^0	Termination Code P: Electroplating by Ni/Sn	Packing Code T: Tape&Reel B: Bulk