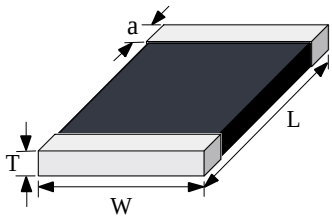
PolyDiode™ RoHS

PolyDiode
0402 SMD H Series

Dimensions



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
$T_{max.}$	-	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

ESD Protection of High Speed Signal Lines

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

Specifications

Packaging
Tape and Reel
T 7 inch reel
0402 (10,000 pcs.)

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

Operating Temperature
-55 to +125℃

Solderability
acc. to IEC 60068-2-58
235℃, 2 sec.

Soldering Heat Resistance
260℃, 10 sec. (IEC 60068-2-58)
280℃, 5 sec. (IEC 60068-2-58)

Response Time
<0.5ns

Temperature coefficient (αV) of clamping voltage (Vc) @ specified test current
<0.01%/ ℃

Power dissipation
0.05W max.

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

Type	Maximum Ratings (125℃)			Specifications (25℃)			
	max. cont. working voltage	max. clamping voltage at 1A (8/20 μs) (note1)	max. non-repetitive surge current (8/20 μs)	Nominal voltage at 1mA (DC) test current		typ. capacitance 1MHz (note2)	max. inductance
	$V_{M(Dc)}$ (V)	V_C (V)	I_{TM} (A)	$V_{N(DC)min.}$ (V)	$V_{N(DC)max.}$ (V)	C (pF)	$L_{typ.}$ (nH)
PD02S050H030PT	5.0	250	-	135	165	3	1.0
PD02S050H050PT	5.0	100	-	45	60	5	1.0
PD02S180H100PT	18.0	50	-	22.0	32.0	10	1.0
PD02S180H200PT	18.0	50	-	22.0	32.0	20	1.0
PD02S180H300PT	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 teminals (IEC preferred test method)

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

How to order

PD	02	S	050	H	030	P	T
Type code PolyDiode	Chip Size 02= EIA0402 03= EIA0603	Single Chip	Working voltage 050= 5V or less 180=18V or less	High-speed signal line application	Capacitance Code 030= $3x10^0$ 050= $5x10^0$ 100=$10x10^0$	Termination Code P: Electroplating by Ni/Sn	Packing Code T: Tape&Reel B: Bulk