

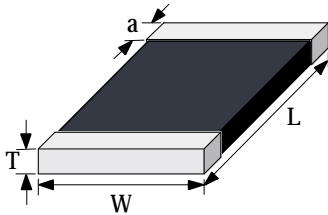
# PolyDiode 0402 SMD N Series

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

## Specifications



Dimensions



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
T <sub>max.</sub>	-	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
- Adequate to replace a silicon TVS diode + EMC capacitor combination.
- Reducing board space and mounting cost
- Capable of withstanding numerous ESD strikes
- RoHS compliant

### Application examples

- Desktop and Note PC
- Mobile communication
- CD/MD/MP3 player
- LCD panel
- Touch panel
- Digital camera
- Button and switch unit
- Battery terminal
- Game machine
- Microphone/ receiver unit
- Audio-Video input-output terminal
- Portable handheld product (e.g. PDA)
- Cellular phones

### WebLinks

Further infos see:

[www.jumbotek.com](http://www.jumbotek.com)

Further technical infos

Please E-mail: [service@jumbotek.com](mailto:service@jumbotek.com)

### Packaging

Tape and Reel

T 7 inch reel (10,000 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 ( $\alpha V$ ) 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

IEC 61000-4-5

Type	Maximum Ratings (125°C)			Specifications (25°C)					
	max. cont. working voltage		max. non-repetitive surge current (8/20 μs)	max. clamping voltage at spec. current (8/20 μs)		Nominal voltage at 1mA (DC) test current		typ. capacitance 1MHz	max. inductance
	V <sub>M(Dc)</sub> (V)	V <sub>M(AC)</sub> (V)	I <sub>TM</sub> (A)	V <sub>C</sub> (V@A)	V <sub>N(DC)min.</sub> (V)	V <sub>N(DC)max.</sub> (V)	C <sub>typ.</sub> (pF)	L <sub>typ.</sub> (nH)	
PD02S030N251PT	3.3	2.5	6	10.0@ 1	3.8	7.0	250	0.8	
PD02S050N281PT	5.5	4.0	20	15.5@ 1	7.1	9.8	280	0.8	
PD02S090N201PT	9.0	6.0	20	23.0@ 1	10.0	14.5	200	0.8	
PD02S120N161PT	12.0	9.0	20	27.0@ 1	14.0	18.5	160	0.8	
PD02S140N141PT	14.0	11.0	20	30.0@ 1	16.0	21.0	140	0.8	
PD02S180N850PT	18.0	14.0	20	40.0@ 1	22.0	28.0	85	0.8	
PD02S220N750PT	22.0	17.0	20	44.0@ 1	24.3	30.0	75	0.8	
PD02S180N400PT	18.0	14.0	5	45.0@ 1	22.0	32.0	40	0.8	
PD02S05UN251PT	5.5	4.0	20	19.0@ 1	8.0	12.0	250	0.8	

Note : Any special design request is acceptable, please contact sales dept. if you need.

### How to order

PD	02	S	050	N	251	P	T
Type code PolyDiode	Chip Size 02= EIA0402 03= EIA0603 05= EIA0805	Single Chip	Working voltage Rated voltage Code, Vm(DC)	Normal application	Capacitance Code 251= 25×10 <sup>1</sup> 281= 28×10 <sup>1</sup> 850= 85×10 <sup>0</sup>	Termination Code P: Electroplating By Ni/sn	Packing Code T: Tape&Reel B: Bulk