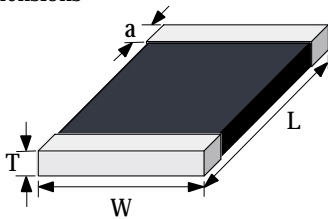


ESD、EFT、Surge Suppressor & EMI/RFI Filter

0402 N 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

- Extra low clamping voltage
- Excellent ESD endurance capability
- Excellent surge suppression capability
- Bidirectional clamping in a two-pin device
- Low leakage current
- No derating of maximum up to 85°C
- Adequate to replace a silicon TVS diode+EMC capacitor combination for save board space and mounting cost

Applications examples

- Desktop and Note PC
- Audio input-output terminal
- GPS systems
- Cellular phone
- CD/MD/MP3 player
- Portable devices (PDA, DSC, BlueTooth..)

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 (αV) of clamping voltage (V_c) @ 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
IEC 61000-4-5

Type	Maximum Ratings (125°C)				Specifications (25°C)			
	Maximum continuous working voltage		Breakdown voltage at 1mA(DC) test current	Max. clamping voltage at spec. current (8/20 μ s)	Maximum non-repetitive surge current (8/20 μ s)	Peak Power (max.Ipp) (8/20 μ s)	Typ. Capacitance 1MHz	Typical Inductance
	V _{DC} (V)	V _{RMS} (V)	V _{N(DC)Min.} (V)	V _C (V@A)	I _{TM} (A)	(W)	C _{typ.} (pF)	L _{typ.} (nH)
PD02S030N251PT	3.3	2.5	3.80	10.5@ 1	6	70	250	0.8
PD02S050N361PT	5.5	4.0	6.90	16.0@ 1	20	400	360	0.8
PD02S090N201PT	9.0	6.0	10.00	23.5@ 1	20	500	200	0.8
PD02S120N161PT	12.0	9.0	13.50	27.5@ 1	20	700	160	0.8
PD02S140N141PT	14.0	11.0	16.00	30.5@ 1	20	900	140	0.8
PD02S180N850PT	18.0	14.0	20.00	40.5@ 1	20	1050	85	0.8
PD02S220N750PT	22.0	17.0	24.30	44.5@ 1	20	1100	75	0.8
PD02S05UN251PT	5.5	4.0	8.00	19.0@ 1	20	500	250	0.8
PD02S180N400PT	18.0	14.0	22.00	45.0@ 1	10	500	40	0.8

How to order

PD	02	S	303	N	251	P	T
Type code PolyDiode	Chip Size 02= EIA0402	Single Chip	Allowable Working voltage 030 =3.3V _{DC}	N Normal application	Capacitance Code 251= 25×10 ¹ 201= 20×10 ¹	Termination Code P: Electroplating by Ni/Sn	Packing Code T: Tape&Reel B: Bulk

Specifications are subject to change without notice