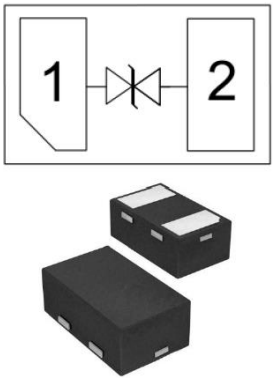
ESD3V3D06B

Features



- 1-Channel Bi-directional ESD diode
- Ultra small package: 0.6x0.3x0.3mm
- Ultra low leakage: nA level
- Low operating voltage: 3.3V
- Low clamping voltage
- 2-pin leadless package
- Complies with following standards:
  - IEC 61000-4-2 (ESD) immunity test
    Air discharge: ±30kV
    Contact discharge: ±30kV
- RoHS Compliant
- Response time is typically < 1 ns

Absolute Maximum Ratings

Tamb=25°C unless otherwise specified

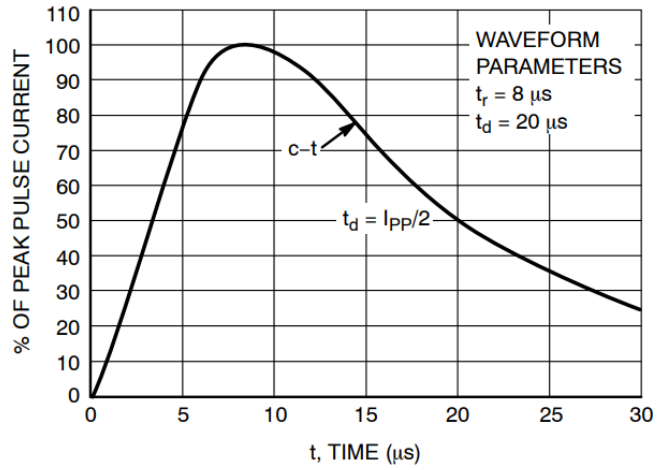
Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppp	100	W
Maximum Reverse Peak Pulse Current	I_{PP} *1	11	A
ESD per IEC 61000−4−2 (Air)	V_{ESD}	±30	KV
ESD per IEC 61000−4−2 (Contact)		±30	
Storage Temperature Range	T_{STJ}	-55 to +150	℃
Operating Temperature Range	T_J	-55 to +125	℃

Electrical Characteristics

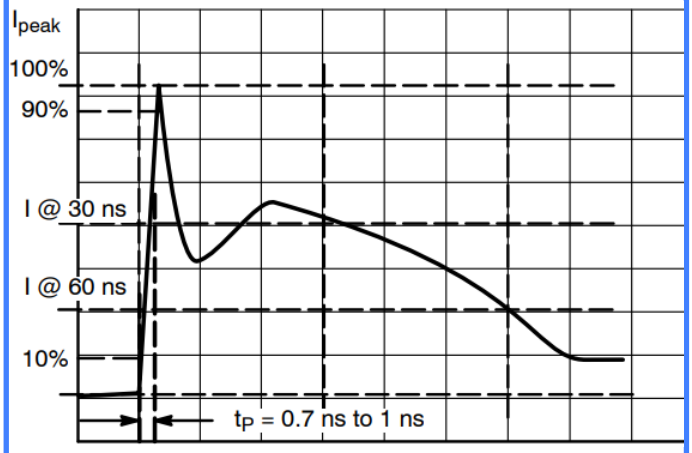
TA=25°C unless otherwise specified

Symbol	Parameter	Conditions	Min	Typ	Max	Units
V_{RWM}	Reverse Working Peak Voltage	-			3.3	V
V_{BR}	Reverse Breakdown Voltage	IT = 1mA	3.5	4.1	5.0	V
I_R	Reverse Current	V_{RWM} = 3.3V			0.1	μA
V_C	Clamping Voltage	I_{PP}=1A, tP =8/20μs			6.5	V
V_C	Clamping Voltage	I_{PP}=11A, tP =8/20μs			10	V
C_D	Diode Capacitance	VR = 0V, f = 1MHz		15	20	pF

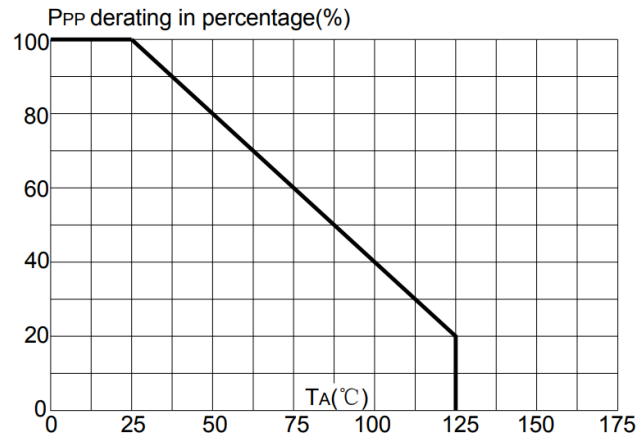
Characteristic Curves



8/20μ s Pulse Waveform

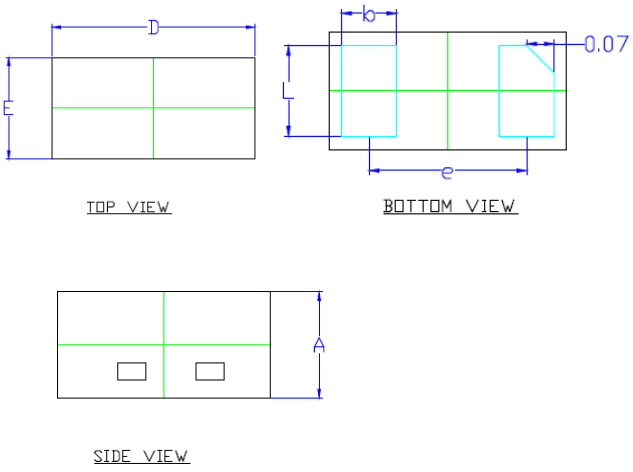


IEC61000−4−2 Pulse Waveform



Power Derating Curve

DFN0603-2 Package Outline & Dimensions



SYM	DIMENSIONS		
	MILLIMETERS		
	MIN	NOM	MAX
A	0.280	0.300	0.320
b	0.130	0.140	0.150
E	0.250	0.300	0.350
D	0.550	0.600	0.650
e		0.400	
L	0.210	0.230	0.250

Disclaimer

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.