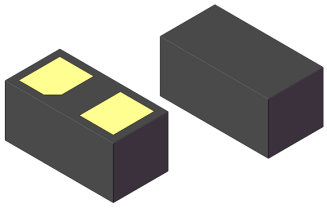
LM-PESD3V6Z1BCSFYL

1-Line Low Capacitance Bi-directional TVS Diode

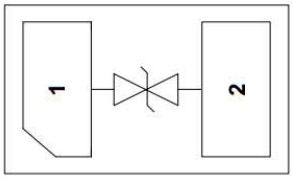
Features

- Low leakage current
- operating voltage: 3.3 V
- Low clamping voltage
- 2-pin leadless package
- Complies with following standards:
- – IEC 61000-4-2 (ESD) immunity test
  Air discharge: ±30kV
  Contact discharge: ±30kV
  –IEC61000-4-5 (Lightning) 20A (8/20 μs)
- RoHS Compliant

Dimensions DFN0603



Pin Configuration



Applications

- USB Ports
- SIM Ports
- Smart Phones
- Wireless Systems
- Set-top box and digital TV
- Digital video interface (DVI)
- Ethernet 10/100/1000 Base T

Mechanical Characteristics

- Package: DFN0603
- Lead Finish: Lead Free
- UL Flammability Classification Rating 94V-0
- Quantity Per Reel:10,000pcs
- Reel Size:7 inch
- Device Marking: AH

Absolute Maximum Ratings(Tamb=25°C unless otherwise specified)

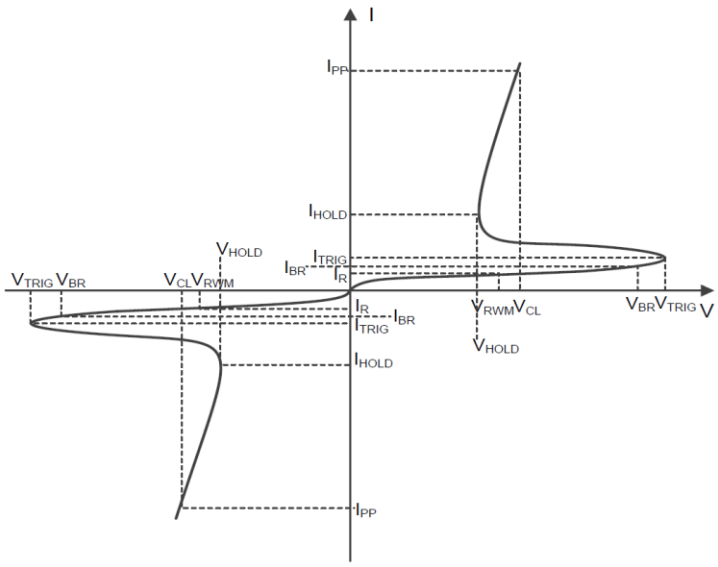
Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppp	160	W
ESD per IEC 61000−4−2 (Air)	V_{ESD}	± 30	kV
ESD per IEC 61000−4−2 (Contact)		± 30	
Operating Temperature Range	T_J	-40 to +125	℃
Storage Temperature Range	T_{STJ}	-55 to +150	℃

Electrical Characteristics(TA=25°C unless otherwise specified)

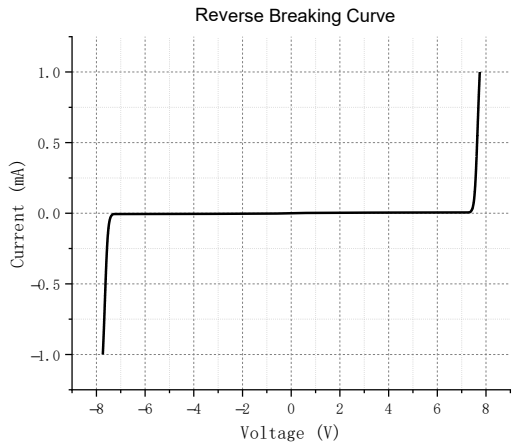
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V_{RWM}				3.3	V
Breakdown Voltage	V_{BR}	I_T = 1mA	6.0	7.8		V
Reverse Leakage Current	I_R	V_{RWM} = 3.3V			0.1	μA
Clamping Voltage	V_C	I_{PP} = 1A (8 x 20 μs pulse)		2.5	3.0	V
Clamping Voltage	V_C	I_{PP} = 20A (8 x 20 μs pulse)		7.4	8.0	V
Junction Capacitance	C_J	V_R = 0V, f = 1MHz		0.43	0.45	pF

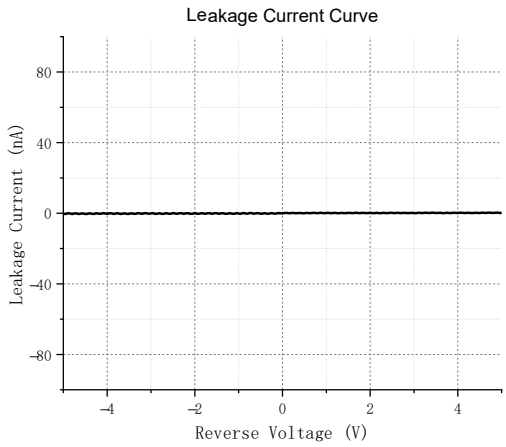
Electrical Parameters(TA=25°C unless otherwise specified)

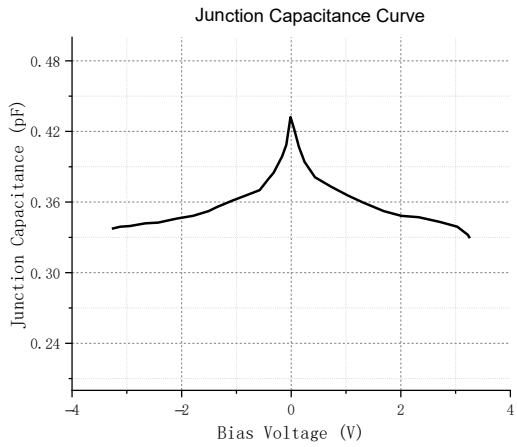
Symbol	Parameters
V_{RWM}	Reverse stand-off voltage
I_R	Reverse leakage current
V_{BR}	Reverse breakdown voltage
I_{BR}	Reverse breakdown current
V_{CL}	Clamping voltage
V_{TRIG}	Reverse trigger voltage
I_{TRIG}	Reverse trigger current
V_{HOLD}	Reverse holding voltage
I_{HOLD}	Reverse holding current
I_{PP}	Peak pulse current

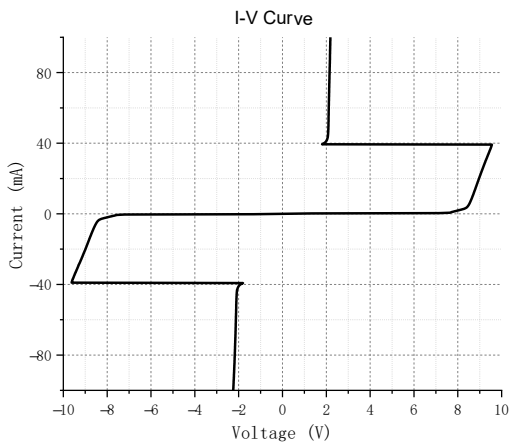


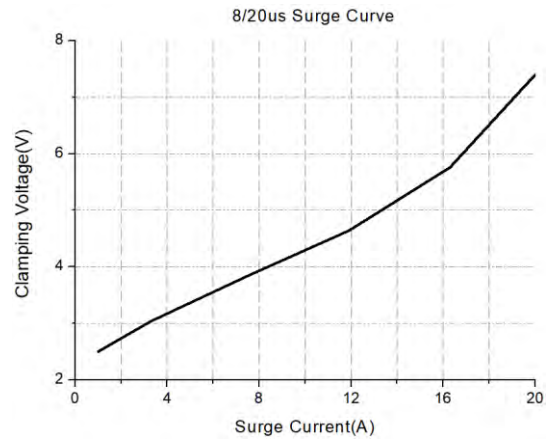
Typical Performance Characteristics(TA=25°C unless otherwise specified)



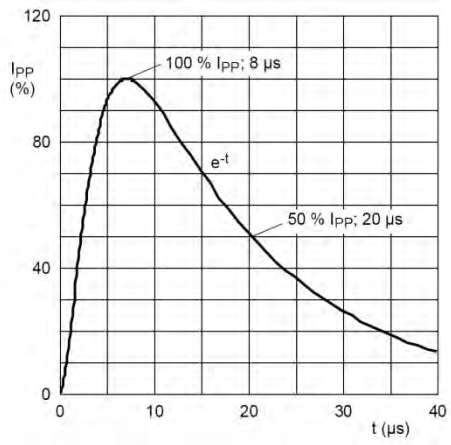




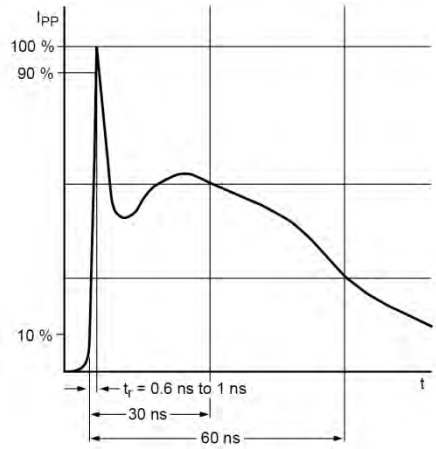




Measurement Wave According to IEC Standard

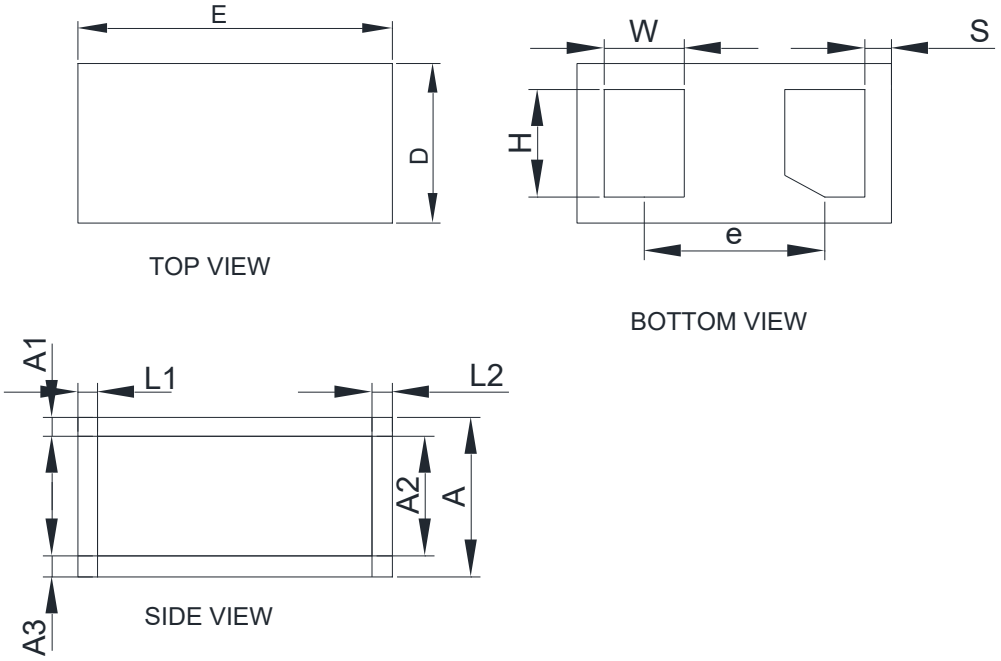


8/20 µs pulse waveform according to IEC 61000-4-5



ESD pulse waveform according to IEC 61000-4-2

DFN0603 Package Outline Drawing



COMMON DIMENSIONS CUNITS MEASURE=MILLIMETER							
SYMBOL	MIN	NOM	MAX	SYMBOL	MIN	NOM	MAX
A	0.290	0.315	0.340	W		0.145	
A1	0.020	0.035	0.050	H		0.190	
A2	0.210	0.230	0.250	S		0.052	
A3	0.043	0.050	0.057	e		0.346	
L1	0.010	0.020	0.030	D	0.265	0.295	0.325
L2	0.010	0.020	0.030	E	0.565	0.595	0.625

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