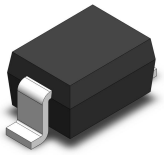
ESDXXV32D-LC

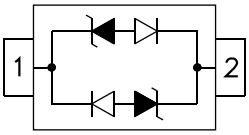
Transient Voltage Suppressors for ESD Protection

Feature

- 350 Watts Peak Pulse Power per Line (tp=8/20μs)
- Protects one bi-directional I/O line
- Low clamping voltage
- Working voltages: 3.3V, 5V, 8V, 12V, 15V, 24V
- Low leakage current
- RoHS compliant
- IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- IEC61000-4-5 (Lightning) 20A、17A、20A、11A 、10A、6A(8/20μs)



SOD-323



Applications

- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Peripherals
- USB Interface

Mechanical Characteristics

- SOD-323 Package
- Molding Compound Flammability Rating : UL 94V-0
- Weight 5.0 Milligrams (Approximate)
- Quantity Per Reel : 3,000pcs
- Lead Finish : Lead Free

Absolute Maximum Ratings (T_A=25℃，RH=45%-75%, unless otherwise noted)

Parameter	Symbol	Value	Units
Storage Temperature Range	T_{STG}	-55 to +150	℃
Operating Junction Temperature Range	T_J	-55 to +125	℃
Lead Soldering Temperature	T_L	260 (10sec.)	℃
Peak Pulse Power dissipation on 8/20μs waveform)	P_{PP}	350	W
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	±15 ±8	KV

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Electrical Characteristics (T_A= 25℃)

Part Number	V_{RWM} (V)	I_R @ V_R (μA)	V_{BR}@ I_T=1mA Min(V)	V_C @1A Max(V)	V_C @ I_{PP} Max(V)	I_{PP}① (A)	C_j@ 0V,1MHZ Typ(pF)
ESD03V32D-LC	3.3	1	4.0	7.5	19.0	20	1.2
ESD05V32D-LC	5.0	1	6.0	9.8	18.0	17	1.2
ESD08V32D-LC	8.0	1	8.5	13.5	27.0	20	1.2
ESD12V32D-LC	12.0	1	13.3	19.0	29.0	11	1.2
ESD15V32D-LC	15.0	1	16.7	24.0	40.0	10	1.5
ESD24V32D-LC	24.0	1	26.7	43.0	55.0	6	1.2

① Surge waveform: 8/20μs

Ratings and V-I Curve Characteristics Curves (T_A=25℃, unless otherwise noted)

Fig1. V- I Curve Characteristics

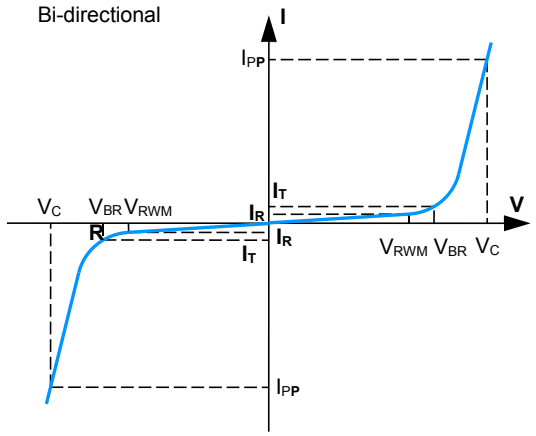


Fig2. Pulse Waveform

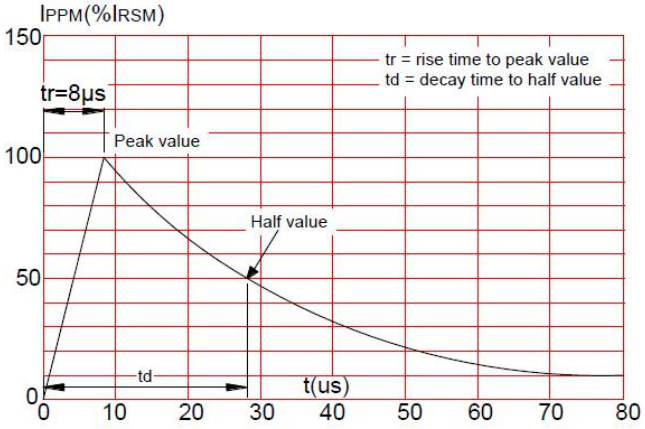


Fig3. Pulse Derating Curve

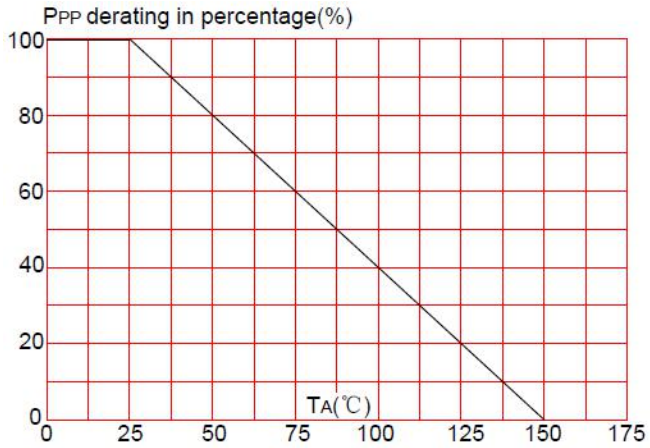
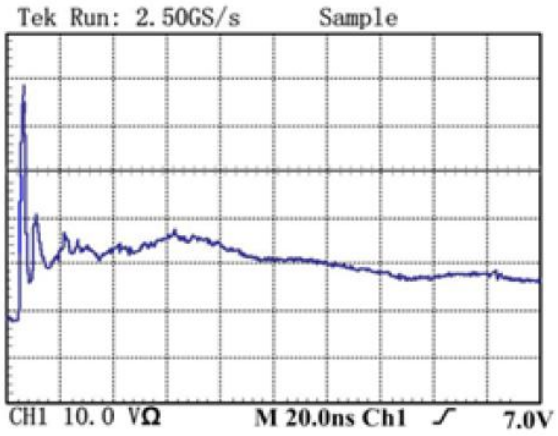


Fig4. ESD Clamping (8KV Contact)



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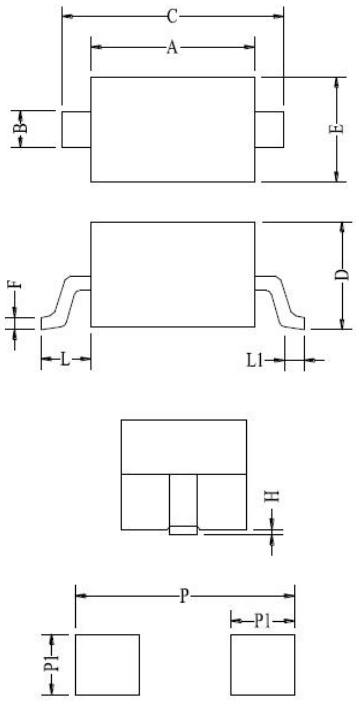
Package Mechanical Data



Symbol	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.60	1.80	0.063	0.071
B	0.25	0.35	0.010	0.014
C	2.50	2.70	0.098	0.106
D	0.00	1.00	0.000	0.039
E	1.20	1.40	0.047	0.055
F	0.08	0.15	0.003	0.006
L	0.475REF		0.019REF	
L1	0.25	0.40	0.010	0.016
H	0.00	0.10	0.000	0.004
P	3.00		0.118	
P1	0.80		0.031	

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