ESD5V0D3P11

Features

- 1100 Watts peak pulse power per line (tP=8/20μs)
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Working voltages: 5V
- Low leakage current
- High surge capability
- RoHS Compliance
- PROTECTION SOLUTION TO MEET:
  IEC61000-4-2 (ESD) ±30kV (air),±30kV (contact)
  IEC61000-4-4 (EFT) 40A (5/50ns)
  IEC61000-4-5 (Lightning) 110A (8/20μs)

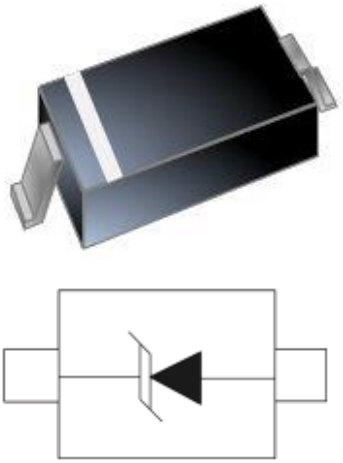
Applications

- Cell phone handsets and accessories
- Microprocessor based equipment
- Personal digital assistants (PDA's)
- Notebooks, desktops, and servers
- Portable instrumentation
- Peripherals
- Power lines

Mechanical Characteristics

- Package: SOD-323
- Molding compound flammability rating : UL 94V-0
- Weight 5 milligrams (approximate)
- Quantity Per Reel:3,000pcs
- Lead finish : lead free

Pin Configuration



SOD-323

Absolute Maximum Ratings

Tamb=25°C unless otherwise specified

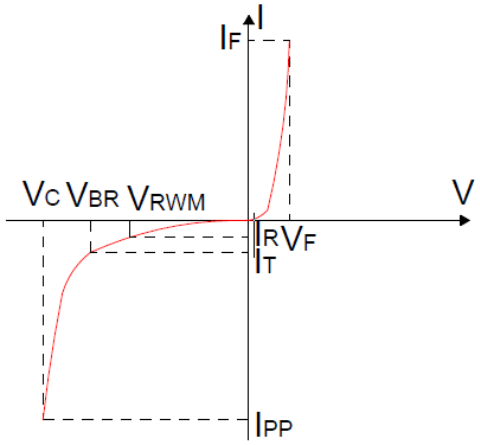
Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppp	1100	W
Peak Pulse Current (8/20μs)	IPP	110	A
ESD per IEC 61000−4−2 (Air)	V_{ESD}	±30	KV
ESD per IEC 61000−4−2 (Contact)		±30	
Lead soldering temperature	TL	260 (10 sec.)	℃
Operating Temperature Range	T_J	-55 to +125	℃
Storage Temperature Range	T_{STJ}	-55 to +150	℃

Electrical Characteristics

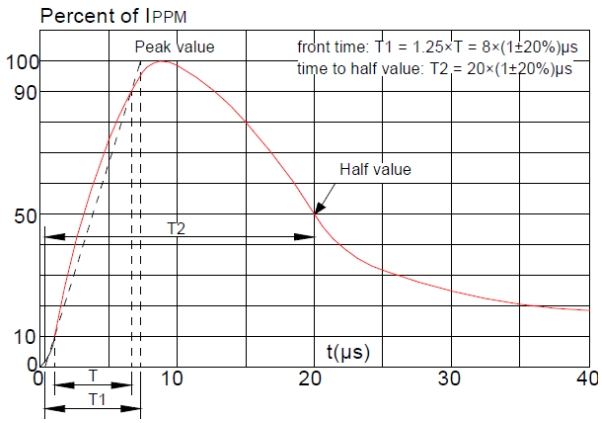
TA=25°C unless otherwise specified

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse working voltage	VRWM				5	V
Reverse breakdown voltage	VBR	IT=1mA	5.5			V
Reverse leakage current	IR	VRWM =±4.5V			1	μA
Clamping voltage	VC	IPP=50A, tP =8/20μs		7.5		V
		IPP=110A, tP =8/20μs		9.5	11	V
Junction capacitance	CJ	VRWM = 0V, f = 1MHz		330	400	pF

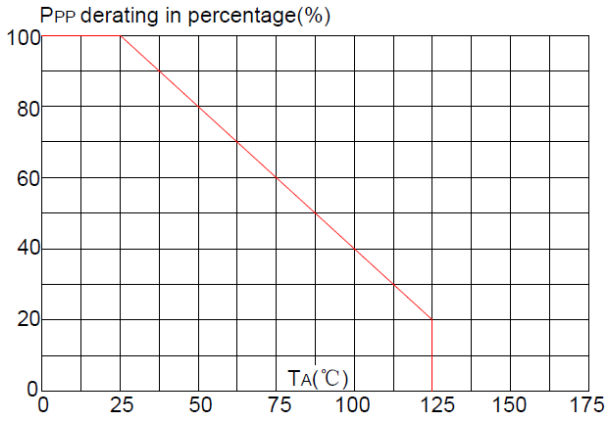
Characteristic Curves



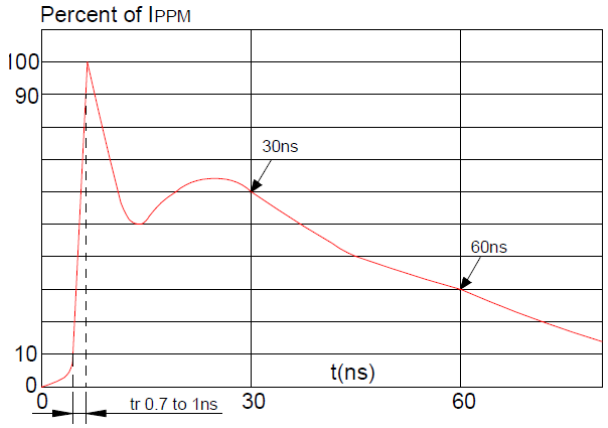
V- I curve characteristics



Pulse Waveform (8/20 μ s)

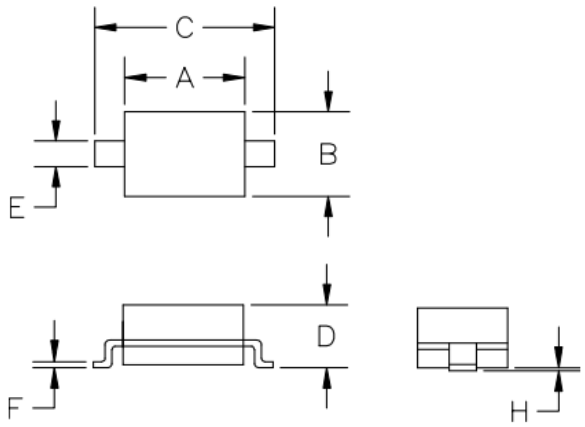


Power Derating Curve

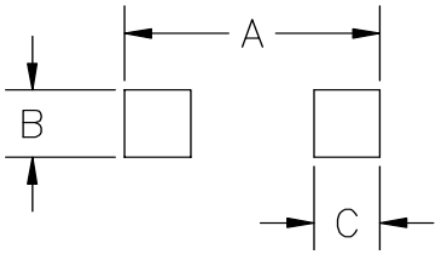


ESD clamping (30KV contact)

SOD-323 Package Outline & Dimensions



Symbol	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.50	1.80	0.060	0.071
B	1.20	1.40	0.045	0.054
C	2.30	2.70	0.090	0.107
D		1.10		0.043
E	0.30	0.40	0.012	0.016
F	0.10	0.25	0.004	0.010
H		0.10		0.004



SYM	DIMENSIONS	
	Millimeters	Inches
A	3.15	0.120
B	0.80	0.031
C	0.80	0.031

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