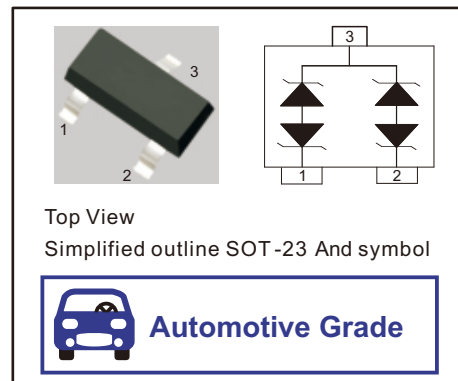


Bidirectional Transient Voltage Suppressor

Features

- 350 Watts Peak Pulse Power per (8/20 μ s)
- IEC61000-4-2 (ESD) \pm 15kV (air), \pm 8kV (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- Protects two bidirectional line
- Low clamping voltage
- Low leakage current
- Qualified to AEC-Q101 Standards for High Reliability



Applications

- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Networking and Telecom
- Serial and Parallel Ports
- Peripherals

Mechanical Characteristics

- Package: SOT-23
- Flammability Rating: UL 94V-0
- High temperature soldering guaranteed:
260°C/ 10s
- Packaging: Tape and Reel

MAXIMUM RATINGS (Ta =25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μ S)	Ppk	350	W
Peak Pulse Current	Ipp	16	A
ESD per IEC 61000-4-2 (Air)	VESD	\pm 15	KV
ESD per IEC 61000-4-2 (Contact)		\pm 8	
Operating Temperature Range	TJ	-55~ +125	°C
Storage Temperature Range	Tstg	-55~ +150	°C



ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse stand-off voltage	VRWM				12	V
Breakdown Voltage	VBR	IT=1mA	13.3			V
Reverse Leakage Current	IR	V=VRWM , Ta=25°C			1	uA
Clamping Voltage	VC	IPP=1A , tp=8/20us			19	V
		IPP=11A , tp=8/20us			32	
Junction Capacitance	Cj	VR=0V , f=1HMz			75	pF

Fig.1 Power Derating Curve

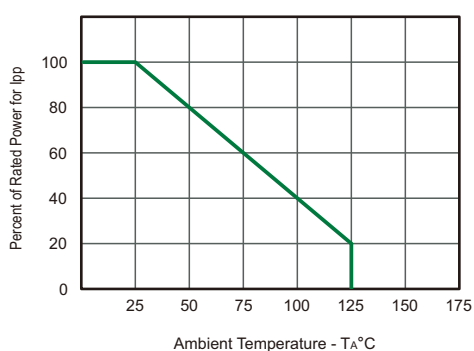


Fig.2 Contact discharge current waveform per IEC61000-4-2

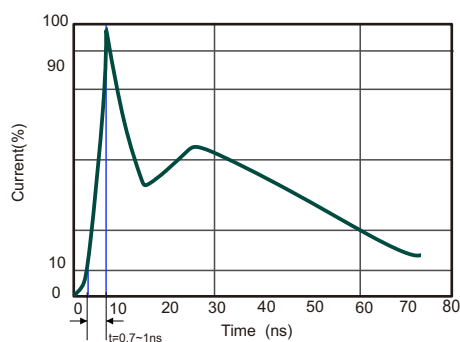
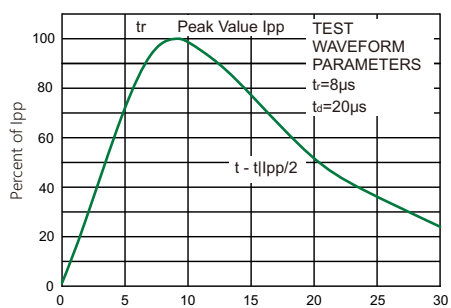
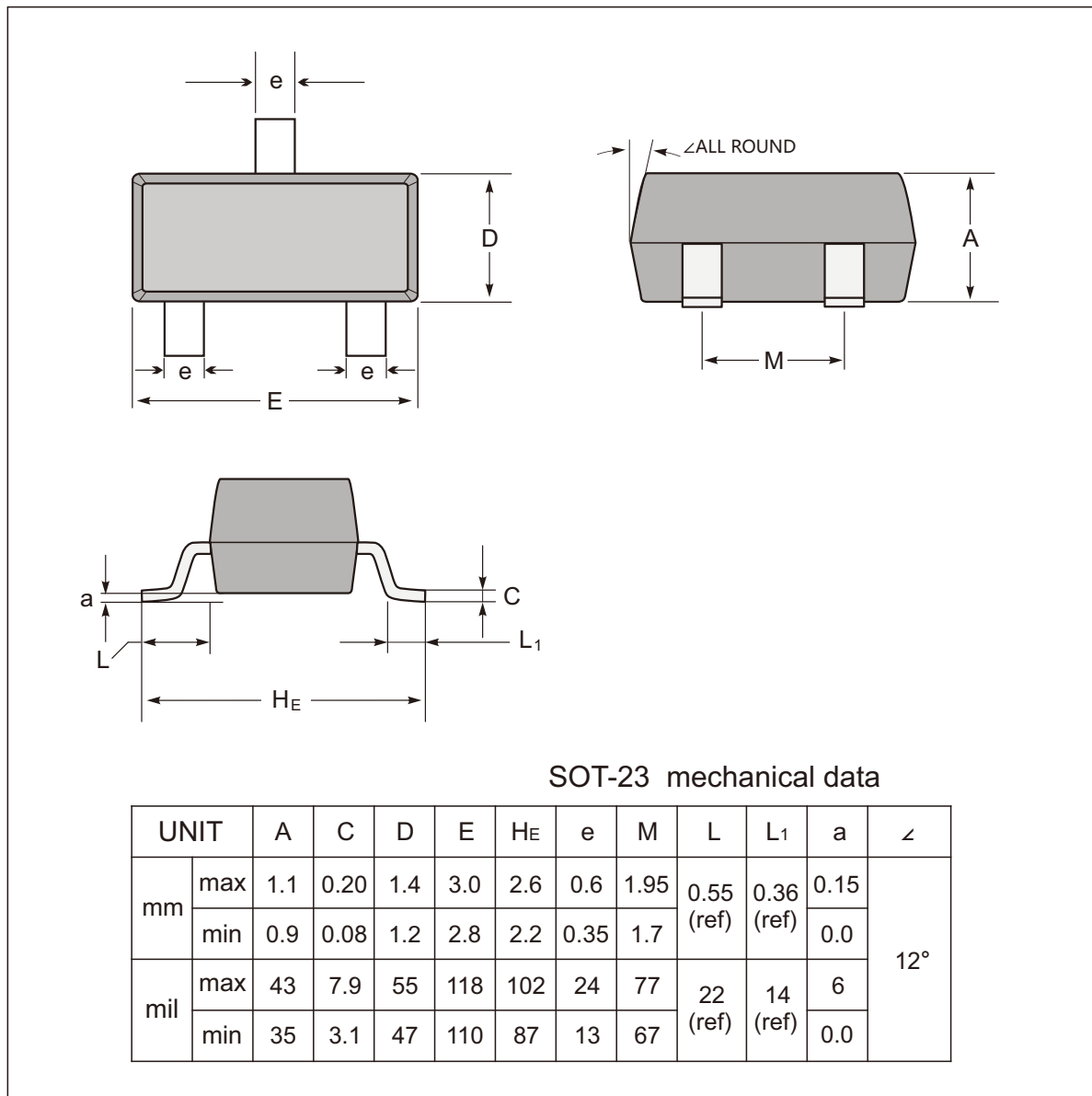


Fig.3 Pulse Waveform

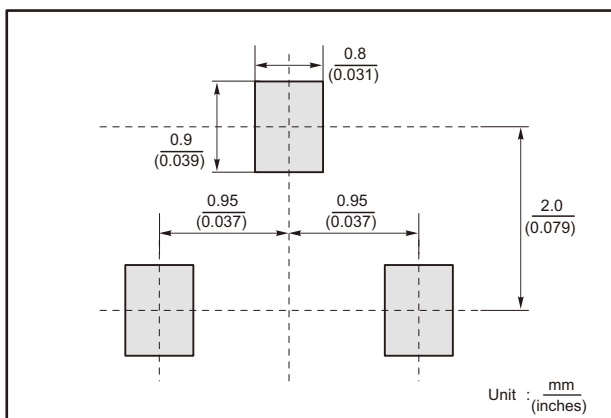




SOT-23 Package Outline Dimensions



The recommended mounting pad size



Marking

Type number	Marking code
ESDB12V0T2	12B



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