

Bidirectional TVS Diodes

FEATURES

- IEC61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- 350 Watts Peak Pulse Power per (tp=8/20 μs)
- Protects one I/O line (bidirectional)
- Low clamping voltage
- Working voltages :3V,5V,8V,12V,15V,18V,24V,36V
- Low leakage current

MACHANICAL DATA

- SOD-323 package
- Packaging: Tape and Reel
- High temperature soldering guaranteed:260°C/10s

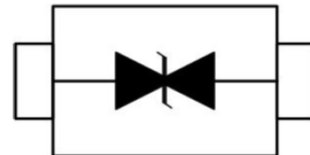
APPLICATIONS

- 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

ABSOLUTE MAXIMUM RATING

Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Air)	± 15	kV
	ESD per IEC 61000-4-2 (Contact)	± 8	
P_{PP}	Peak Pulse Power (8/20 μs)	350	W
T_{OPT}	Operating Temperature	-55/+150	°C
T_{STG}	Storage Temperature	-55/+150	°C
T_{L}	Lead Soldering Temperature	260 (10 sec.)	°C

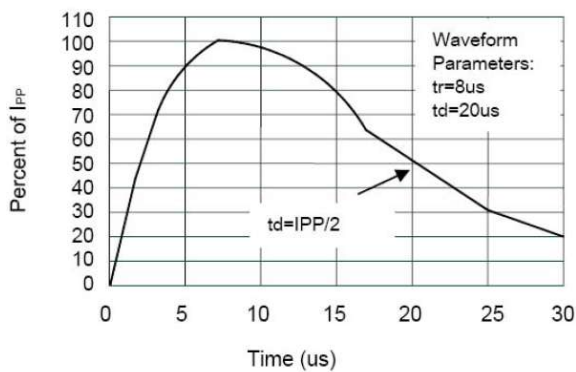
SOD-323



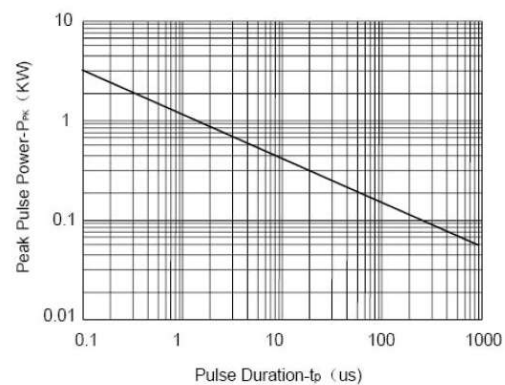
ELECTRICAL CHARACTERISTICS (Tamb=25°C)

PART NUMBER	DEVICE MARKING	V _{RWM} (V) (max.)	V _B (V) (min.)	I _T (mA)	V _{C@1A} (V) (max.)	V _C (V) (max.) (@A)	I _R (μA) (max.)	C _T (pF) (max.)
SD03C	2A	3.3	4.0	1	7.5	10.5	20	40
SD05C	2B	5.0	6.0	1	9.8	18.0	17	10
SD08C	2C	8.0	8.5	1	13.4	24.0	15	2
SD12C	2D	12.0	13.3	1	19.0	32.0	11	1
SD15C	2J	15.0	16.7	1	24.0	38.0	10	1
SD18C	2K	18.0	20.0	1	29.0	45.0	9	1
SD24C	2H	24.0	26.7	1	43.0	52.0	7	1
SD36C	2N	36.0	40.0	1	60.0	75.0	5	1

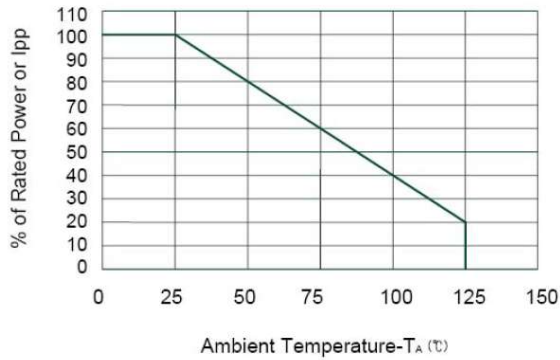
ELECTRICAL CHARACTERISTICS CURVE



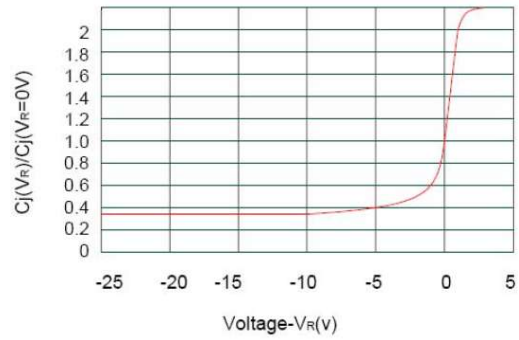
Pulse Waveform



Non-Repetitive Peak Pulse Power vs. Pulse Time

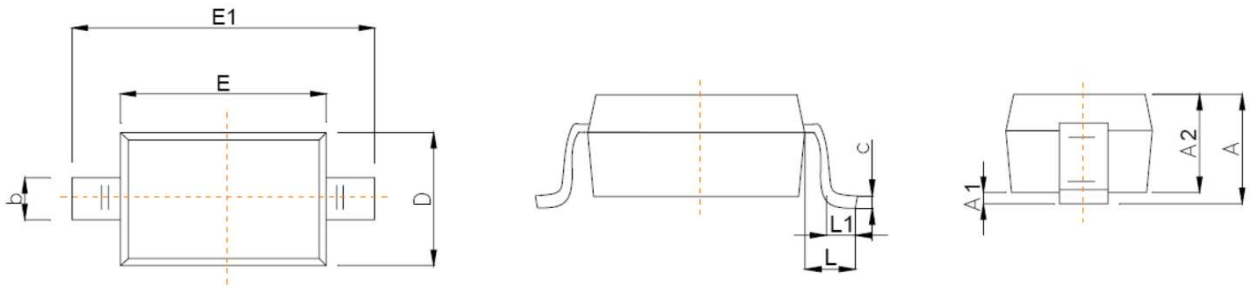


Power Derating Curve

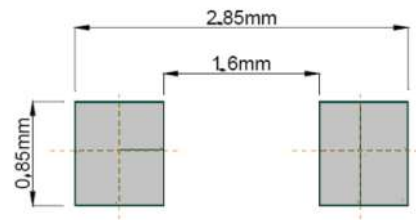


Junction Capacitance vs. Reverse Voltage

SOD-323 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters	
	Min	Max
A		1.00
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
e	1.800	2.040
L	0.475 REF	
L1	0.250	0.400
e	0°	8°



Recommended Pad outline