

**Description**

The SDxxC Series is designed for applications requiring transient over voltage protection capability. They are intended for use in voltage and ESD sensitive equipment such as computers, printers, business machines, communication systems, medical equipment and other applications. These devices are ideal for situations where board space is at a premium.

This series has been specifically designed to protect sensitive components which are connected to power, data and transmission lines from overvoltage caused by ESD (electrostatic discharge), CDE(Cable Discharge Events), and EFT (electrical fast transients).

Features

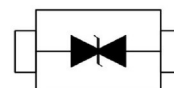
- IEC61000-4-2(ESD) $\pm 15\text{kV}(\text{air})$, $\pm 8\text{kV}(\text{contact})$
- IEC61000-4-4(EFT) 40A(5/50 μs)
- 350Watts Peak Pulse Power per (tp=8/20us)
- Protects one I/O line(unidirectional)
- Low clamping voltage
- Working voltages:
3V, 5V, 8V, 12V, 15V, 18V, 20V, 24V, 36V
- Low leakage current

Mechanical Data

- SOD-323 Package
- Flammability Rating: UL 94V-0
- 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

Package outline**Pin Configuration****Ordering Information**

- Device: SDxxC
- Package: SOD-323
- Material: Halogen free
- Packing: Tape & Reel
- Quantity per reel: 3,000pcs

ABSOLUTE MAXIMUM RATING

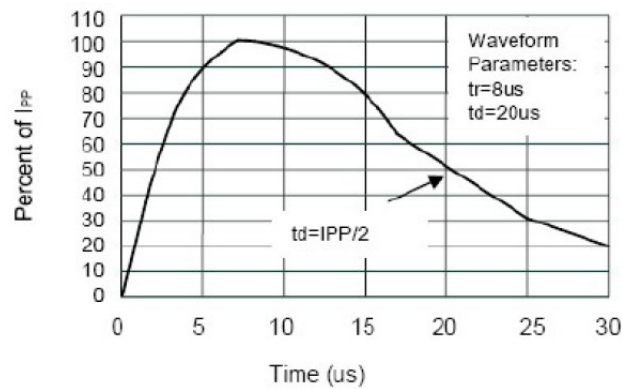
Parameters	Symbol	Value	Unit
ESD per IEC61000-4-2(Air)	VESD	± 30	kV
ESD per IEC61000-4-2(Contact)			
Peak Pulse Power (8/20us)	PPP	350	W
Operating temperature	TOPT	-55-+150	°C
Storage temperature range	TSTG	-55-+150	°C
Lead Soldering temperature	TL	260(10 sec.)	°C

Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified).

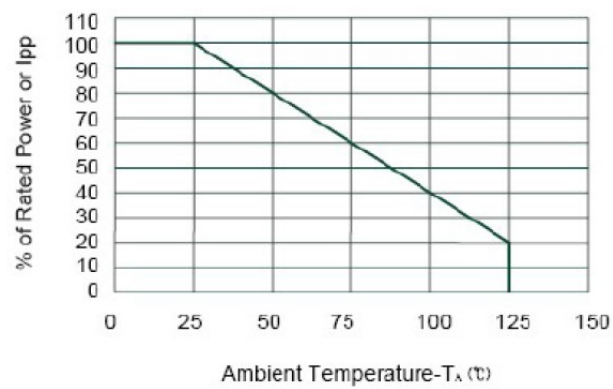
PART NUMBER	DEVICE MARKING	VRWM (V) (max.)	VB (V) (min.)	IT (mA)	Vc@1A (V) (max.)	Vc (V) (max.) (@A)	IR (uA) (max.)	CT (pF) (max.)
SD03C	2A	3.3	4.0	1	7.5	13.0 20	40	450
SD05C	2B	5.0	6.0	1	9.8	18.0 17	10	200
SD08C	2C	8.0	8.5	1	13.4	24.0 15	2	120
SD12C	2D	12.0	13.3	1	19.0	32.0 11	1	75
SD15C	2J	15.0	16.7	1	24.0	38.0 10	1	68
SD18C	2K	18.0	20.0	1	29.0	45.0 9	1	57
SD20C	2L	20.0	22.3	1	35.0	50.0 8	1	52
SD24C	2H	24.0	26.7	1	43.0	52.0 7	1	50
SD36C	2N	36.0	40.0	1	60.0	75.0 5	1	35

SDxxC Series

ELECTRICAL CHARACTERISTICS CURVE



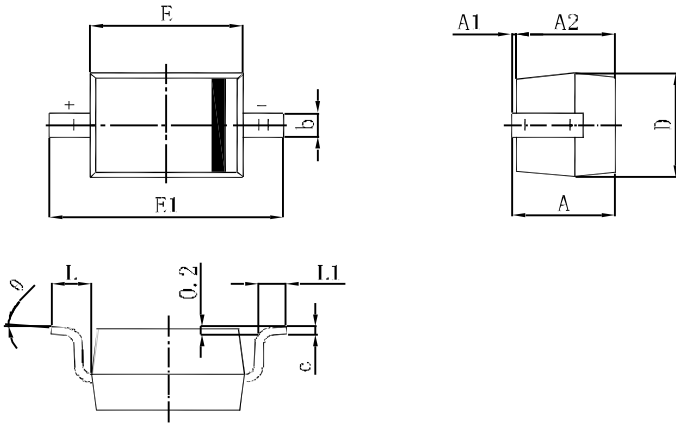
Pulse Waveform



Power Derating Curve

SOD-323 PACKAGE OUTLINE Plastic surface mounted package

SOD-323



Symbol	Min.(mm)	Max.(mm)
A		1.000
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
L	0.475REF	
L1	0.250	0.400
θ	0°	8°