

Features

: SHDN SXOVHVSZRZHU
 3URWHFWV RQH GDWD RU SRZHU OLOH
 8OWUD ORZ OHDNDJH Q\$ OHYHO
 2SHUDWLQJ YROWDJH 9
 8OWUD ORZ FODPSLQJ YROWDJH
 &RPSOLHV ZLWK IROORZLQJ VWDQGDUGV
 ±, (& -- (6' LPPXQLW\ WHVW
 \$LU GLVFKDUJH " N9
 &RQWDFW GLVFKDUJH " N9
 ±, (& -- /LJKWQLQJ \$ QV

Mechanical Characteristics

Package: SOD-323
 Lead Finish: Matte Tin
 Case Material: "Green" Molding Compound.
 UL Flammability Classification Rating 94V-0
 Moisture Sensitivity: Level 3 per J-STD-020
 Terminal Connections: See Diagram Below

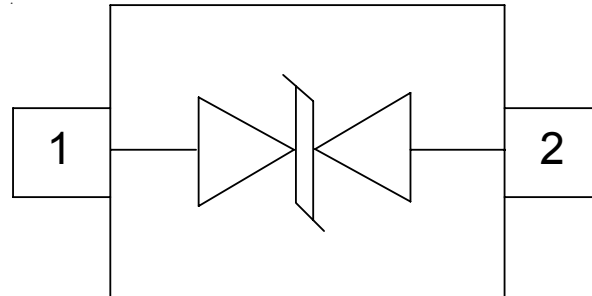
Applications

- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation
- Peripherals
- Pagers Peripherals
- Desktop and Servers

Ordering Information

Part Number	Qty per Reel	Reel Size
SD12C	3000	7"

Dimensions and Pin Configuration



SD12C

Bi-directional TVS Diode

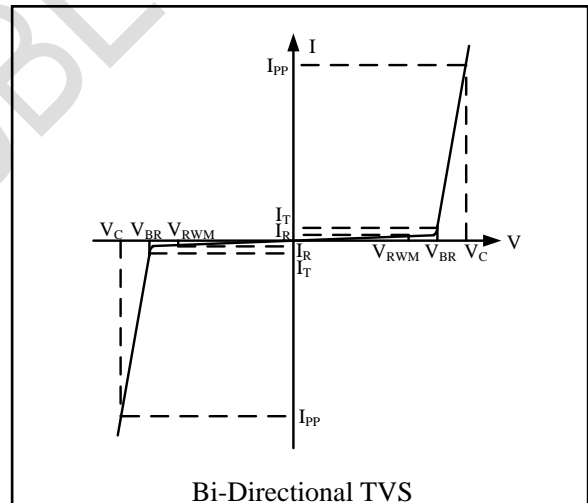
www.sot23.com.tw

Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

3 DUDPHWHU	6 \ P E R O	9 D O X H	8 Q L W
3 HDN 3XOVH 3RZHU — V	3 SN		:
3 HDN 3XOVH &XUUHQW — V ,33			\$
(6' SHU ,(& í í \$LU	9 (6'	"	N 9
(6' SHU ,(& í í &RQWDFW		"	
2 SHUDWLQJ 7HP SHUDWXUH 5DQJH-	í WR		f &
6 WRUDJH 7HP SHUDWXUH 5DQJH	7 VWJ	í WR	f &

Electrical Characteristics (TA=25°C unless otherwise specified)

Symbol	Parameter
V_{RWM}	Nominal Reverse Working Voltage
I_R	Reverse Leakage Current @ V_{RWM}
V_{BR}	Reverse Breakdown Voltage @ I_T
I_T	Test Current for Reverse Breakdown
V_C	Clamping Voltage @ I_{PP}
I_{PP}	Maximum Peak Pulse Current
C_{ESD}	Parasitic Capacitance
V_R	Reverse Voltage
f	Small Signal Frequency



3 DUDPHWHU	6 \ P E R O O L Q	7 \ S	0 D [8 Q L W H V W & R Q G L W L R Q
5 H Y H U V H : R U N L Q J 9 5 R O W D J H				9
% U H D N G R Z Q 9 R O W D J H				9 ,7 P \$
5 H Y H U V H D I N D J H & X U U H Q W				— \$ 95 : 0 9
) R Z D U G 9 R O W D J H (9)				9 ,) P \$
& O D P S L Q J 9 R O W D J H 9 &				9 ,33 \$ [— V S X O V H
& O D P S L Q J 9 R O W D J H 9 &				9 ,33 \$ [— V S X O V H
- X Q F W L R Q & D S D F L W D Q F H				S) 95 9 0 +]

PROTECTION PRODUCTS
Typical characteristics

Fig1. 8/20 μ s Pulse Waveform

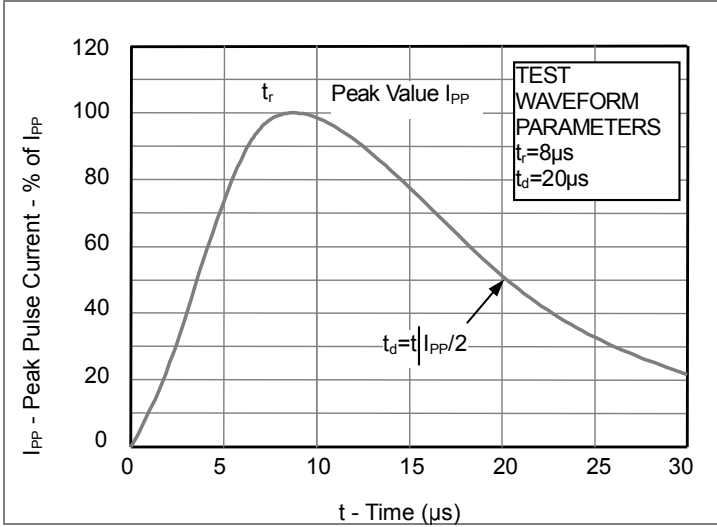


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

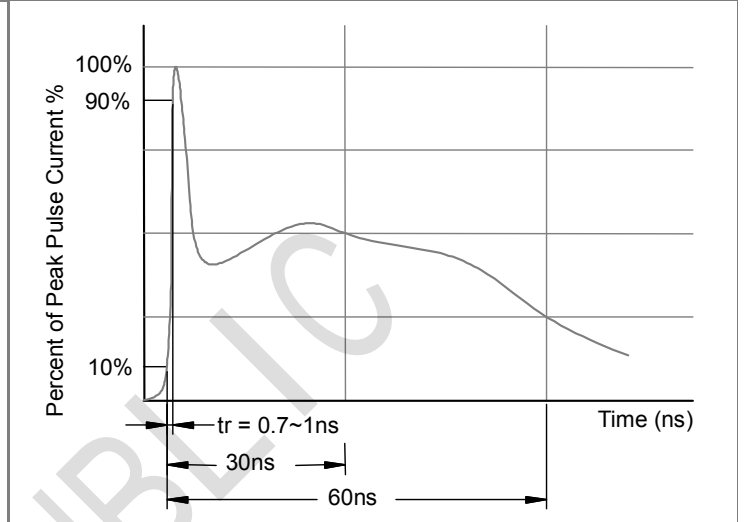
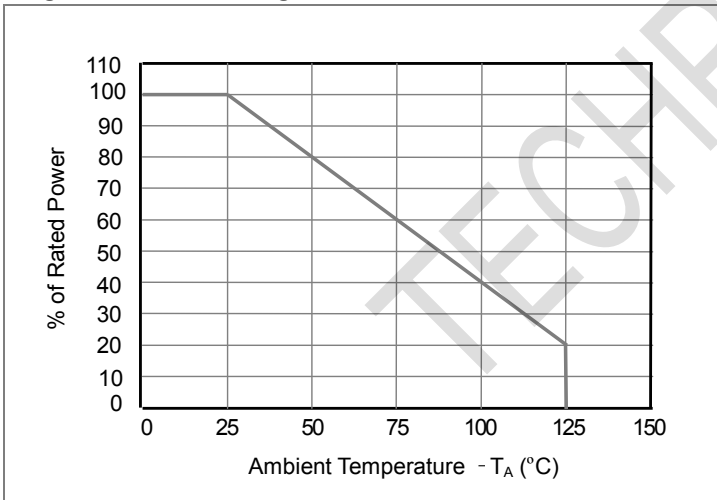
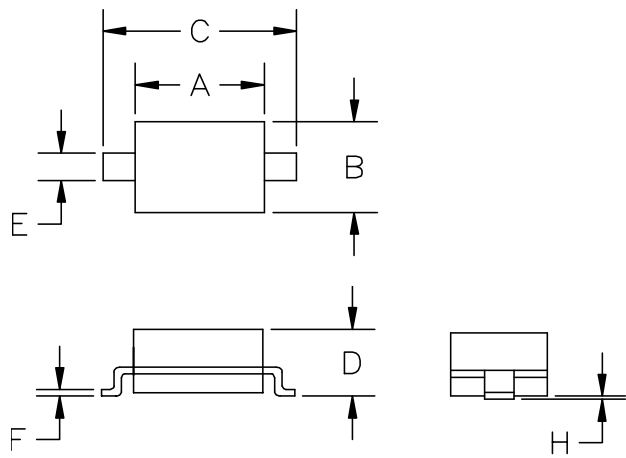


Fig3. Power Derating Curve

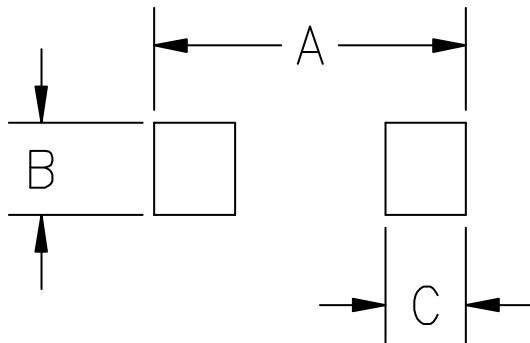


Outline Drawing - SOD-323



SYM	DIMENSIONS			
	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

Land Pattern - SOD-323



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
A	3.15	0.120
B	0.80	0.031
C	0.80	0.031