



TECH PUBLIC
台舟电子

TPESDBLC5V0D3

1-Line Bi-directional Diode

www.sot23.com.tw

Features

- 80W peak pulse power per line ($t_P = 8/20\mu s$)
- Replacement for MLV(0402)
- Bidirectional configurations
- Response time is typically < 1ns
- Low clamping voltage
- RoHS compliant
- Transient protection for data lines to
- IEC61000-4-2(ESD) ±25KV(air), ±25KV(contact);
- IEC61000-4-4 (EFT) 40A (5/50ns)

Mechanical Characteristics

- SOD323 package
- Lead Finish:Matte Tin
- UL Flammability Classification Rating 94V-0

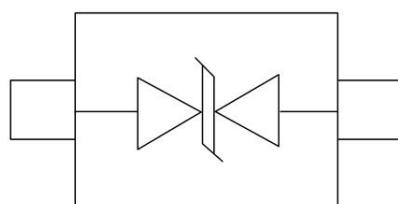
Applications

- Cellular phones
- Portable devices
- Digital cameras
- Power supplies

Ordering Information

Part Number	Qty per Reel	Reel Size
TPESDBLC5V0D3	3000	7"

Dimensions and Pin Configuration



SOD-323

Marking: 3M* Or 5/G



TECH PUBLIC
台舟电子

TPESDBLC5V0D3

1-Line Bi-directional Diode

www.sot23.com.tw

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

Parameter	Symbol	Value	Unit
ESD per IEC 61000-4-2 (Air)	VESD	±25	
ESD per IEC 61000-4-2 (Contact)		±25	kV
Operating Temperature Range	TJ	-55 to +155	°C
Storage Temperature Range	Tstg	-40 to +125	°C

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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Peak Reverse Working Voltage	V _{RWM}				5	V
Breakdown Voltage	V _{BR}	I _t = 1mA	5.6	6.7	7.8	V
Reverse Leakage Current	I _R	V _{RWM} = 5V T=25°C			1.0	µA
Maximum Reverse Peak Pulse Current	I _{PP}			5		A
Clamping Voltage	V _C	I _{PP} =1A			10	V
Clamping Voltage	V _C	I _{PP} =3A			13	V
Clamping Voltage	V _C	I _{PP} =5A			15	V
Junction Capacitance	C _j	V _R =0V f = 1MHz		15		pF

Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise Specified)

Fig1. 8/20 μs Pulse Waveform

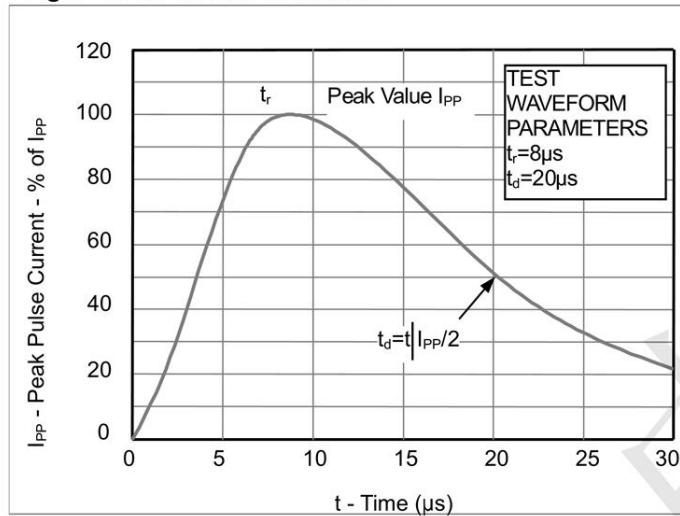


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

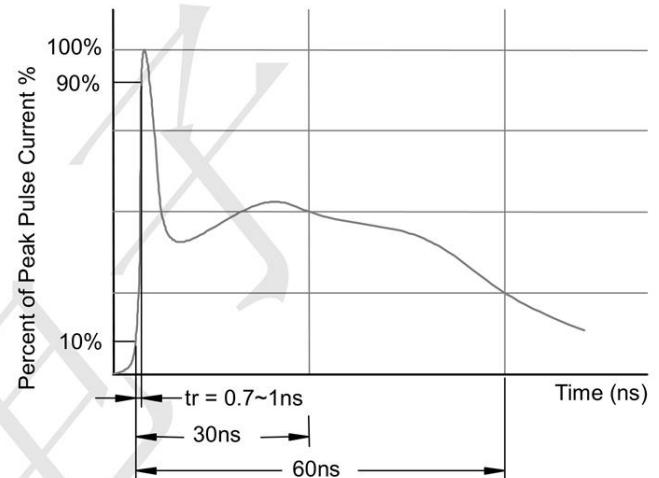
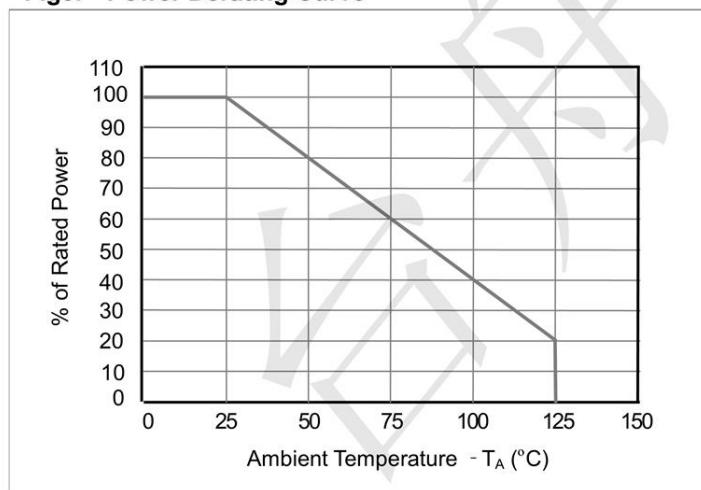


Fig3. Power Derating Curve





TECH PUBLIC

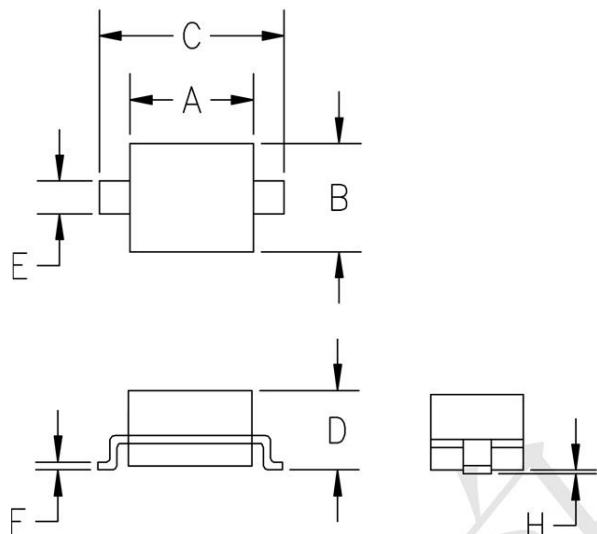
台舟电子

TPESDBLC5V0D3

1-Line Bi-directional Diode

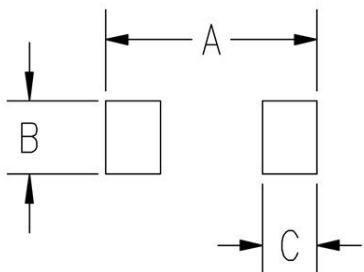
www.sot23.com.tw

Outline Drawing - SOD323



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 - SOD323



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

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for ESD Suppressors / TVS Diodes category:

Click to view products by TECH PUBLIC manufacturer:

Other Similar products are found below :

[60KS200C](#) [D18V0L1B2LP-7B](#) [D5V0F4U5P5-7](#) [DESD5V0U1BB-7](#) [NTE4902](#) [P4KE27CA](#) [P6KE11CA](#) [P6KE39CA-TP](#) [P6KE8.2A](#)
[SA110CA](#) [SA60CA](#) [SA64CA](#) [SMBJ12CATR](#) [SMBJ33CATR](#) [SMBJ8.0A](#) [ESD101-B1-02ELS](#) [E6327](#) [ESD105-B1-02EL](#) [E6327](#) [ESD112-B1-02EL](#) [E6327](#) [ESD119B1W01005E6327XTSA1](#) [ESD5V0L1B02VH6327XTSA1](#) [ESD7451N2T5G](#) [19180-510](#) [CPDT-5V0USP-HF](#)
[3.0SMCJ33CA-F](#) [3.0SMCJ36A-F](#) [HSPC16701B02TP](#) [D3V3Q1B2DLP3-7](#) [D55V0M1B2WS-7](#) [DESD5V0U1BL-7B](#) [DRTR5V0U4SL-7](#)
[SCM1293A-04SO](#) [ESD200-B1-CSP0201](#) [E6327](#) [SM12-7](#) [SMLJ45CA-TP](#) [CEN955 W/DATA](#) [82350120560](#) [VESD12A1A-HD1-GS08](#)
[CPDUR5V0R-HF](#) [CPDQC5V0U-HF](#) [CPDQC5V0USP-HF](#) [CPDQC5V0-HF](#) [D1213A-01LP4-7B](#) [D1213A-02WL-7](#) [MMAD1108/TR13](#)
[5KP100A](#) [5KP15A](#) [5KP18A](#) [5KP48A](#) [5KP90A](#) [5KP90CA](#)