

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) $\pm 25KV$ (air), $\pm 25KV$ (contact);
- IEC61000-4-4 (EFT) 40A (5/50ns)

Mechanical Characteristics

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

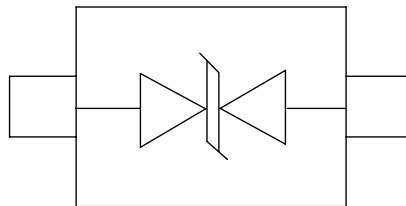
Applications

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

Ordering Information

Part Number	Qty per Reel	Reel Size
TPPESD5V0V1BA	3000	7"

Dimensions and Pin Configuration



SOD-323

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

Parameter	Symbol	Value	Unit
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	VESD	± 25 ± 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

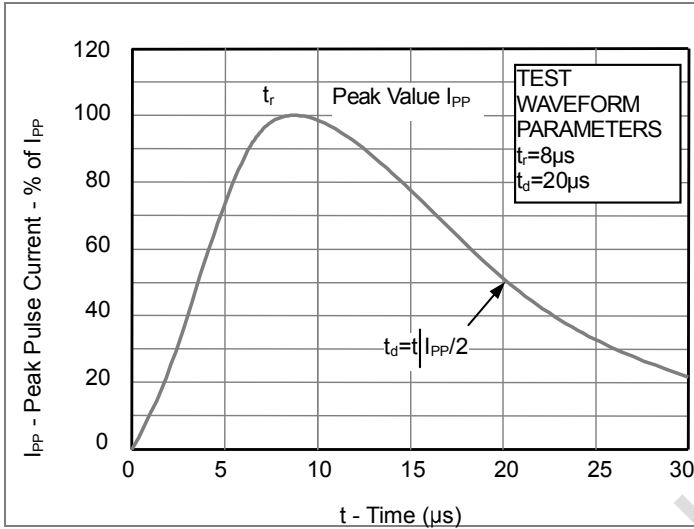


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

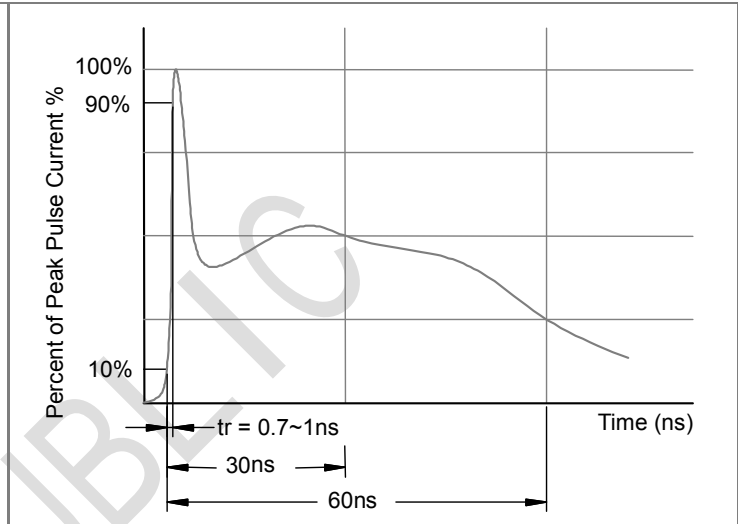
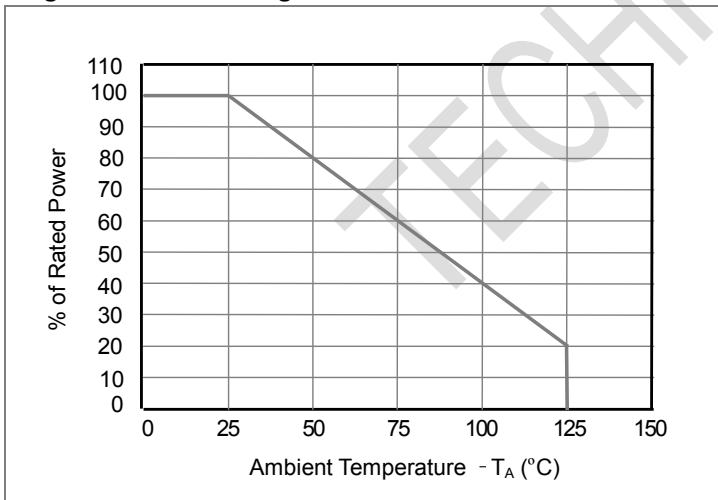
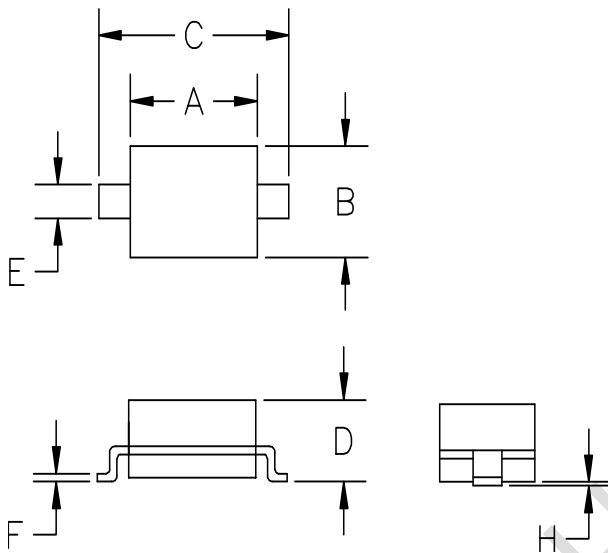


Fig3. Power Derating Curve

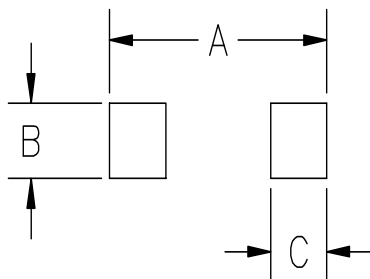


Outline Drawing - SOD323



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

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