

Transient Voltage Suppressor

Features

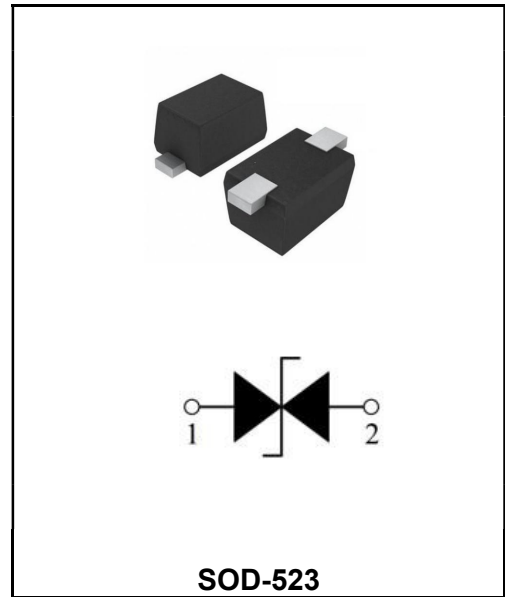
- ◆ 100 Watts Peak Pulse Power per Line (tp= 8/20μs)
- ◆ Protects one I/O or power line
- ◆ Replacement for MLV (0603)
- ◆ Low Clamping Voltage
- ◆ Working Voltage: 5 V
- ◆ Low Leakage Current
- ◆ Solid-state silicon-avalanche technology
- ◆ IEC 61000-4-2 (ESD) ±30 KV contact ±30 KV Air
- ◆ IEC 61000-4-4 (EFT) 40A (5/50ns)
- ◆ IEC 61000-4-5 (Lightning 8/20μs): 8A

Application

- ◆ Cellular Handsets & Accessories
- ◆ Personal Digital Assistants (PDAs)
- ◆ Notebooks & Handhelds
- ◆ Portable Instrumentation
- ◆ Digital Cameras
- ◆ MP3 players

Order Information

Part Number	Package	Marking	Size (mm)	Delivery Form	Delivery Quantity
ESD5VFBD523	SOD-523	5XB	1.6X0.8X0.6	7" T&R	3000PCS/Tape



Limiting Values(TA = 25 °C, unless otherwise specified)

Symbol	Parameter	Conditions	value	Unit
P _{PP}	Peak Pulse Power	tP = 8/20 μs	100	W
I _{PPM}	Rated Peak Pulse Current	tP = 8/20 μs	8	A
V _{ESD}	ESD per IEC 61000-4-2 ESD per IEC 61000-4-2	(Air) (Contact)	30 30	KV
T _L	Lead soldering temperature		260(10seconds)	°C
T _J	Junction Temperature	-	-55 to+150	°C
T _{stg}	Storage Temperature Range	-	-55 to+150	°C

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

Symbol	Parameter	Conditions	Min	Typ.	Max	Unit
V _{RWM}	Reverse Stand-Off Voltage		-	-	5.0	V
V _{BR}	Breakdown Voltage	IT = 1mA	5.6	-	7.4	V
I _R	Reverse Leakage Current	VRWM = 5 V; TA = 25 °C	-	-	0.1	uA
V _C	Clamping Voltage	IPP=8 A, tP =8/20μs	-	-	9.5	V
C _J	Junction Capacitance	VR = 0V, f = 1 MHz	-	15	-	pF

Typical Characteristics

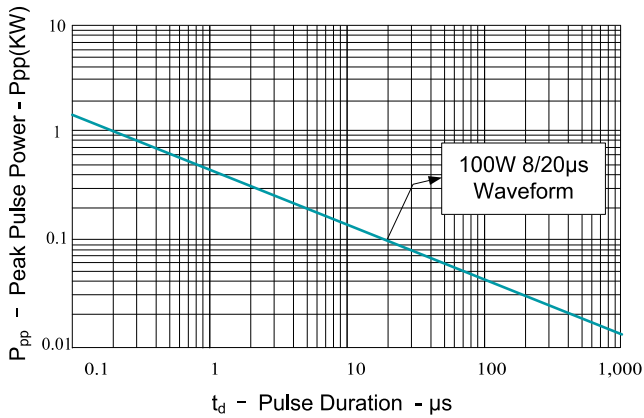


Fig.1 Peak Pulse Power vs. Pulse Time

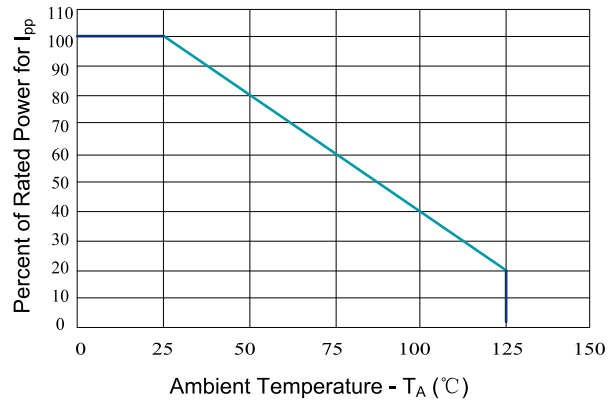


Fig.2 Power Derating Curve

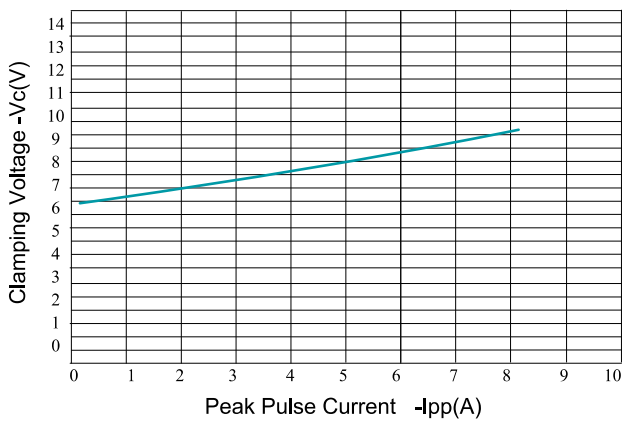


Fig.3 Clamping Voltage vs. Peak Pulse Current

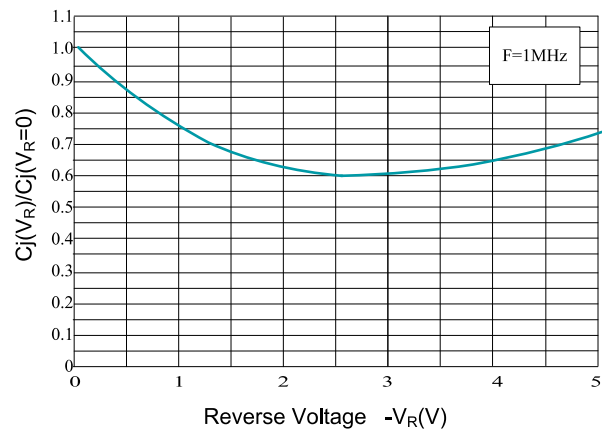


Fig.4 Normalized Junction Capacitance vs. Reverse Voltage

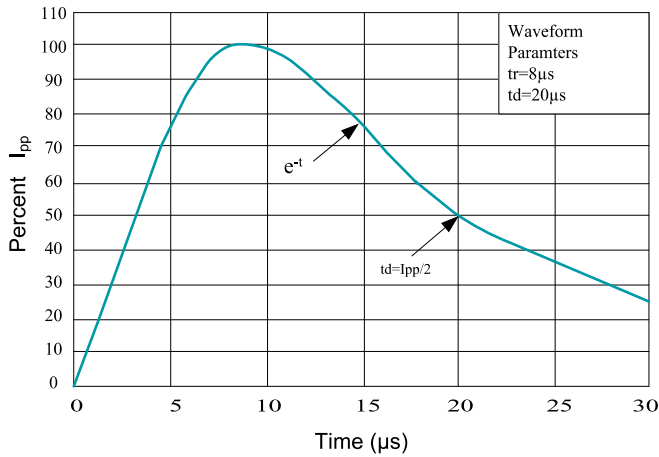


Fig.5 Pulse Waveform

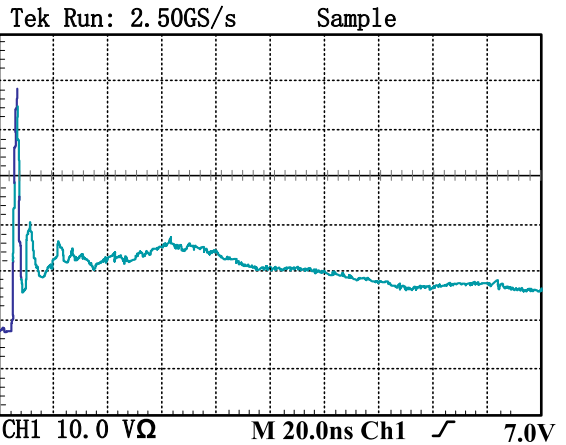
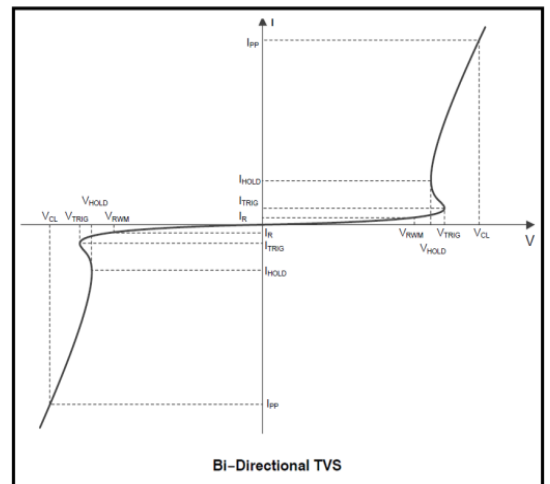


Fig.6 ESD Clamping(8kV Contact per IEC 61000-4-2)

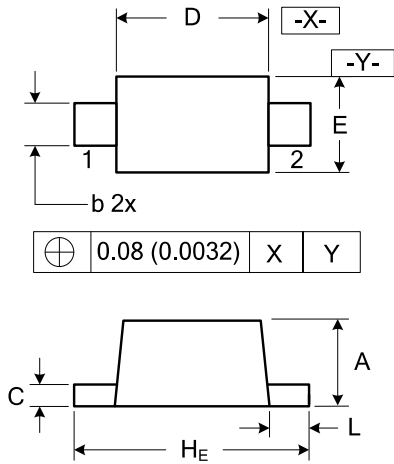
Electrical Parameters (T=25°C)

Symbol	Parameter
V_{RWM}	Reverse Stand-Off Voltage
I_R	Reverse Leakage Current
V_{CL}	Clamping Voltage
I_{PP}	Peak Pulse Current
V_{TRIG}	Reverse Trigger Voltage
I_{TRIG}	Reverse Trigger Current
V_{HOLD}	Reverse Holding Voltage
I_{HOLA}	Reverse Holding Current

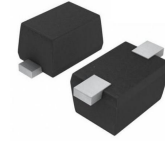


Package Dimension

PACKAGE OUTLINE



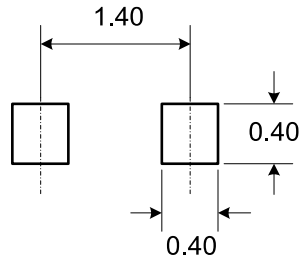
⊕	0.08 (0.0032)	X	Y
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SOD-523

DIMENSIONS

SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	0.50	0.70	0.020	0.028
b	0.25	0.35	0.010	0.014
C	0.07	0.20	0.0028	0.0079
D	1.10	1.30	0.043	0.051
E	0.70	0.90	0.028	0.035
H _E	1.50	1.70	0.059	0.067
L	0.15	0.25	0.006	0.010



DIMENSIONS: MILLIMETERS

Notes

1. Controlling Dimensions in Millimeters.
2. Dimensions are exclusive of mold flash and metal burrs.

单击下面可查看定价，库存，交付和生命周期等信息

[>>YFW\(佑风微\)](#)