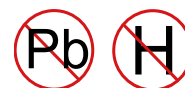




YEA SHIN TECHNOLOGY CO. , LTD

Low Capacitance Surge TVS

YSS0273P3D5



APPLICATIONS

- ◆ Portable Electronics
- ◆ Desktops, Servers and Notebooks
- ◆ Cellular Phones
- ◆ MP3 Ports
- ◆ Digital Camera Ports

IEC COMPATIBILITY

- ◆ IEC 61000-4-2 (ESD) $\pm 30\text{kV}$ (Air), $\pm 30\text{kV}$ (Contact)
- ◆ IEC 61000-4-5 (Surge) 15A (8/20 μs)

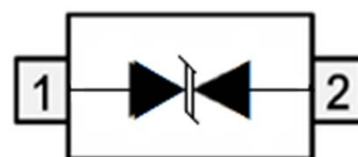
FEATURES

- ◆ Reverse Working Voltage : 3.3V
- ◆ Low Capacitance : 27pF (typ.)
- ◆ Marking : L

SOD-523A



PIN CONFIGURATION



DEVICE CHARACTERISTICS

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MAXIMUM RATING (TA=25°C UNLESS OTHERWISE NOTED)			
PARAMETER	SYMBOL	VALUE	UNITS
ESD per IEC 61000-4-2 (Air)	V _{ESD}	±30	kV
ESD per IEC 61000-4-2 (Contact)		±30	
Peak Pulse Power (tp=8/20 μs)	P _{PP}	140	W
Peak Pulse Current (tp=8/20 μs)	I _{PP}	15	A
Operating Temperature Range	T _J	-40 ~ +125	°C
Storage Temperature Range	T _{STG}	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS (TA=25°C UNLESS OTHERWISE NOTED)						
PARAMETER	TEST CONDITION	SYMBOL	Min.	Typ.	Max.	UNITS
Reverse Working Voltage		V _{RWM}	-	-	3.3	V
Reverse Leakage Current	V _R =3.3V	I _R	-	0.1	1.0	μA
Breakdown Voltage	I _T =10mA	V _{BR}	3.7	-	-	V
Surge Clamping Voltage (NOTE 1)	I _{PP} =1A, tp=8/20 μs	V _C	-	-	6.5	V
	I _{PP} =15A, tp=8/20 μs		-	7.8	10	
TLP Clamping Voltage (NOTE 1)	I _{TLP} =16A, tp=10/100 ns	V _C	-	8	-	V
Dynamic Resistance (NOTE 1、2)	tp=10/100ns	R _{DYN}	-	0.25	-	Ω
Junction Capacitance (NOTE 1)	V _R =0V, f=1MHz	C _J	-	27	36	pF

NOTES :

1. Guaranteed by design and not subject to production test.
2. R_{DYN} calculated based on I_{PP}=8A to I_{PP}=16A, tp=10/100ns.

DEVICE CHARACTERISTICS

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FIG. 1-I-V Curve

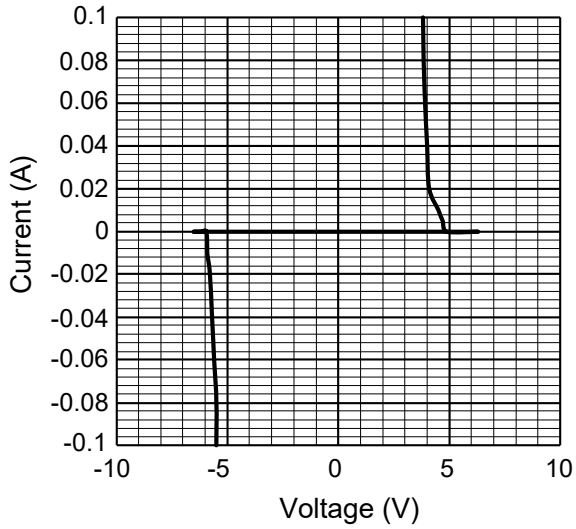


FIG. 2-Junction Capacitance

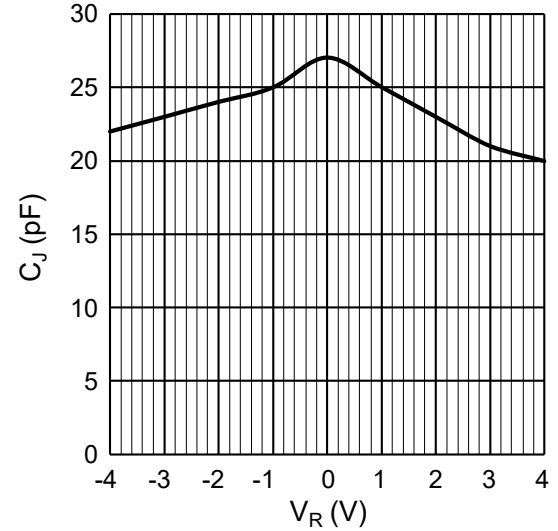


FIG. 3-8/20 μ s pulse waveform

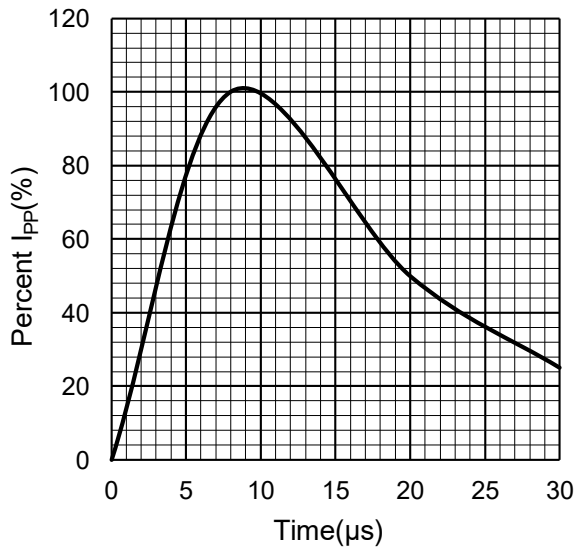
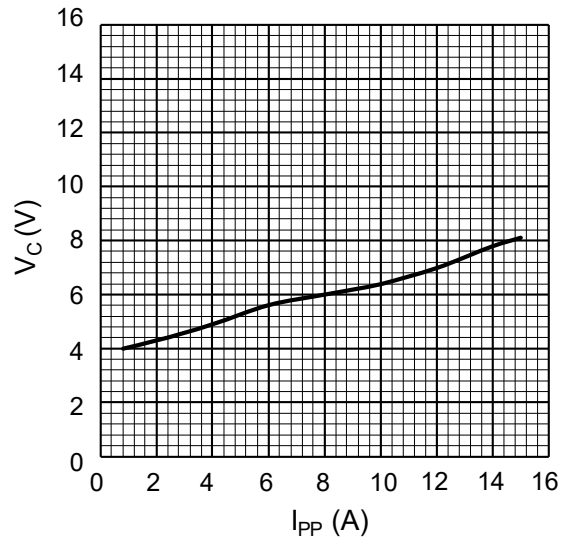


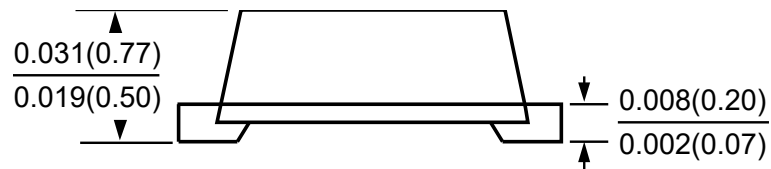
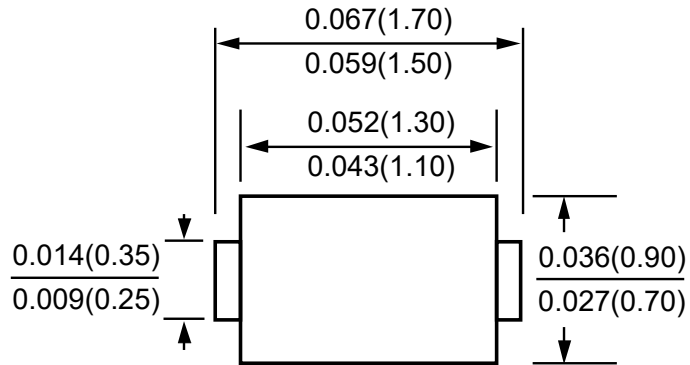
FIG. 4-Clamping Voltage vs Peak Pulse Current



PACKAGE OUTLINE & DIMENSIONS

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Package Outline Dimensions



SOD-523A

Dimensions in inches and (millimeters)