



Single Line TVS Diode

GESD5V0D1

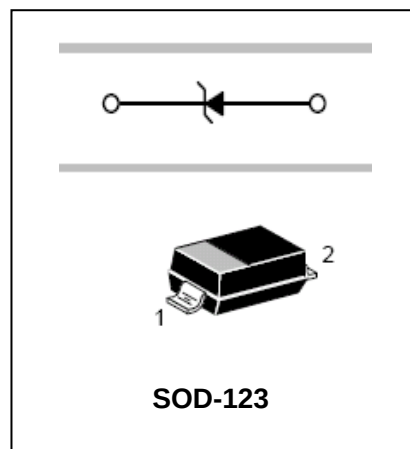
FEATURES

- Suitable replacement for MLV'S ESD protection
- Low leakage current
- Low clamping voltage



APPLICATIONS

- Single line TVS diode
- Computers and peripherals
- Communication systems
- Audio and video equipment



ORDERING INFORMATION

Type No.	Marking	Package Code
GESD5V0D1	5U	SOD-123

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
Reverse standoff voltage	V_{RWM}	5	V
Peak pulse power dissipation($t_p=8/20\mu s$)	P_{PP}	260	W
Peak pulse current($t_p=8/20\mu s$)	I_{PP}	15	A
ESD (electrostatic discharge capability)	V_{PP}	30	kV
Junction temperature	T_j	150	°C
Storage and operating temperature	$T_{STG} T_{amb}$	-55 to +150	°C

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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse breakdown voltage	V_{BR}	$I_R=5mA$	6.4	6.8	7.2	V
Reverse leakage current	I_R	$V_{RWM}=5V$			1	μA
Diode capacitance	C_d	$V_R=0V, f=1MHz$			430	pF
Clamping voltage	$V_{(CL)}$	$I_{PP}=1A$			9	V
		$I_{PP}=15A$			20	
Differential resistance	R_{diff}	$I_R=1mA$			400	Ω
		$I_R=1mA$			80	
		$I_R=1mA$			200	
		$I_R=1mA$			225	
		$I_R=0.5mA$			300	

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

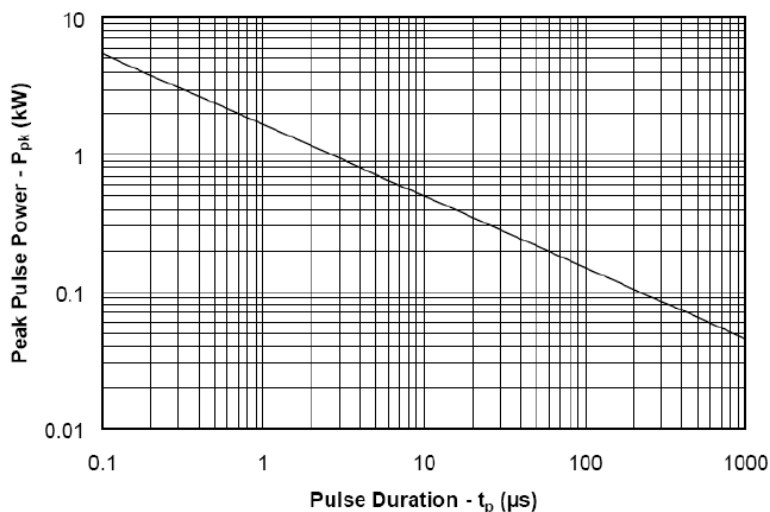


Fig.1 Non-Repetitive Peak Pulse Power vs. Pulse Time

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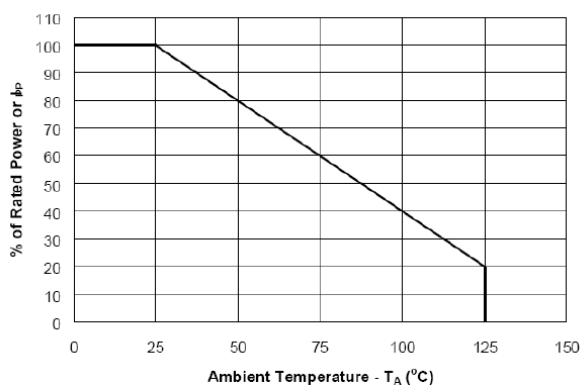


Fig.2 Power Derating Curve

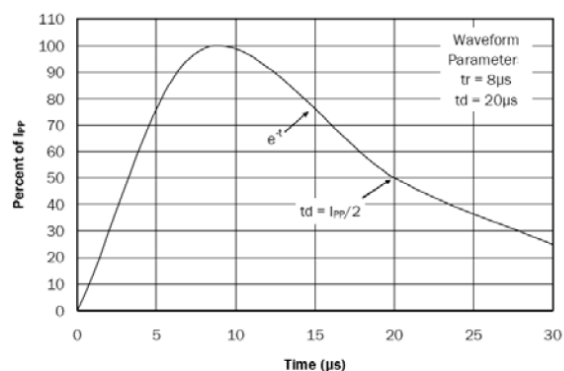
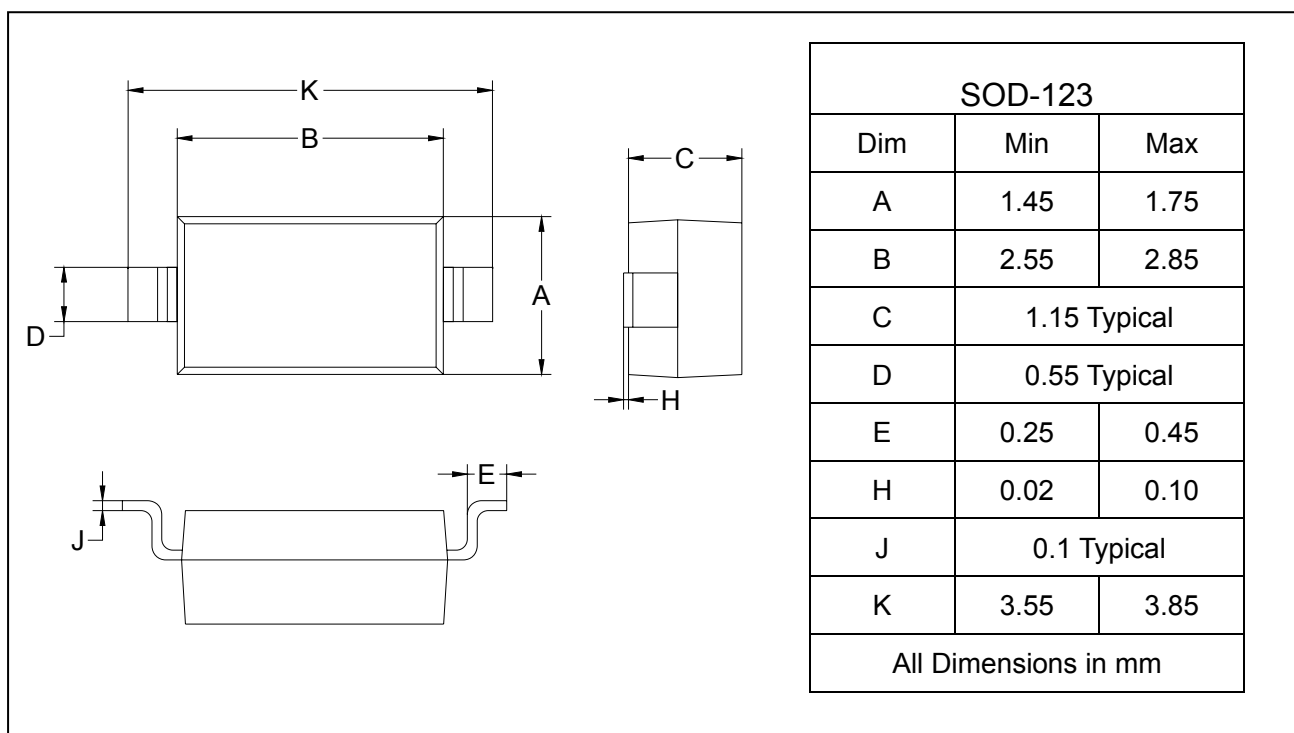


Fig.3 Waveform

PACKAGE OUTLINE

Plastic surface mounted package

SOD-123

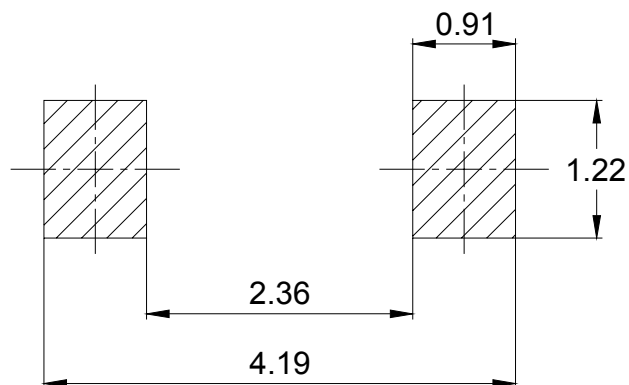




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SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

Device	Package	Shipping
GESD5V0D1	SOD-123	3000/Tape&Reel