

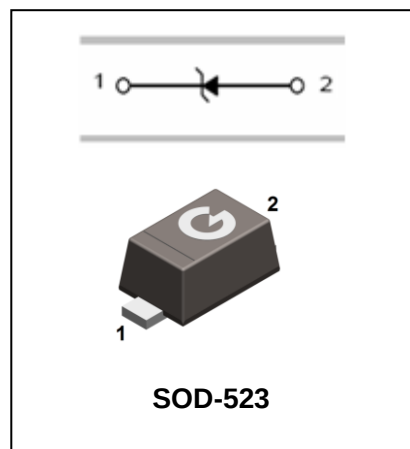
Single Line TVS Diode

GESD36VS1D5

FEATURES

- 150 Watts peak pulses power($t_p=8/20\mu s$)
- Small package for use in portable electronics
- Suitable replacement for MLV'S in ESD protection applications
- Low clamping voltage and leakage current
- In compliance with EU RoHS 2002/95/EC directives

HF



APPLICATIONS

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

ORDERING INFORMATION

Type No.	Marking	Package Code
GESD36VS1D5	SMP	SOD-523

MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Limits	Unit
Reverse standoff voltage	V_{RWM}	36	V
Peak pulse power dissipation($t_p=8/20\mu s$)	P_{PP}	150	W
Peak pulse current($t_p=8/20\mu s$)	I_{PP}	3	A
ESD According to IEC61000-4-2 Air	V_{ESD}	30	kV
ESD According to IEC61000-4-2 Contact Discharge		30	kV
Junction temperature	T_J	-50 to +150	$^\circ\text{C}$
Storage and operating temperature	T_{STG}	-50 to +150	$^\circ\text{C}$

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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse breakdown voltage	V_{BR}	$I_R=1mA$	40			V
Reverse leakage current	I_R	$V_{RWM}=36V$			0.2	μA
Diode capacitance	C_d	$V_R=0V, f=1MHz$			20	pF
Clamping voltage	$V_{(CL)}$	$I_{PP}=1A$			55	V
		$I_{PP}=3A$			65	V

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

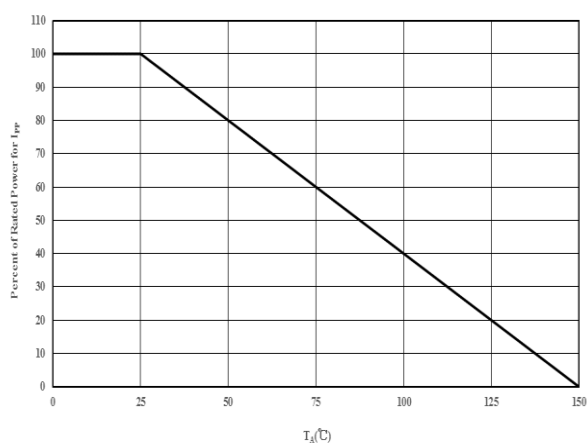


Fig1. Power Derating Curve

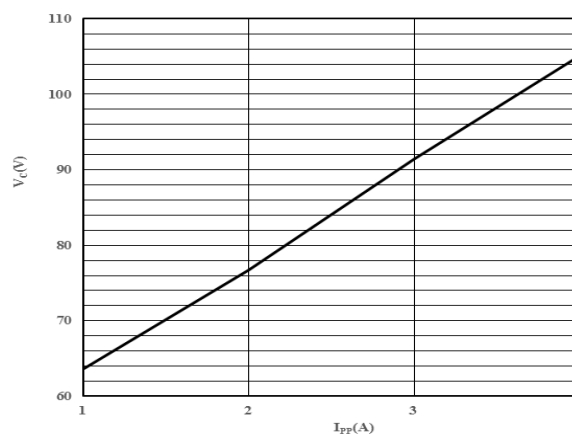


Fig2. Clamping Voltage vs. Peak Pulse Current

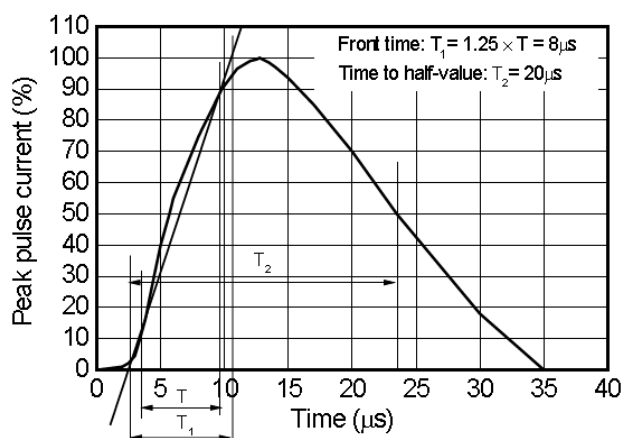


Fig3. 8/20 μs waveform per IEC61000-4-5

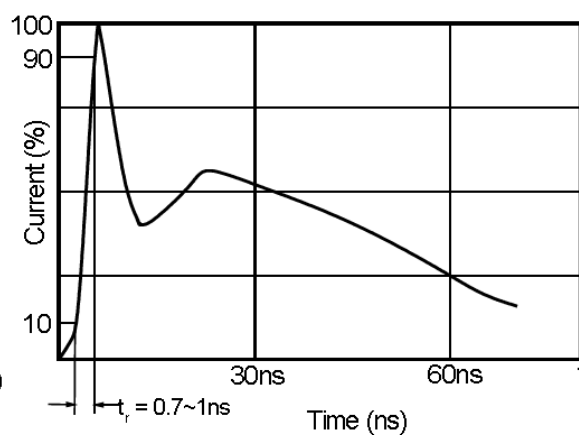


Fig4. ESD pulse waveform according to IEC61000-4-2

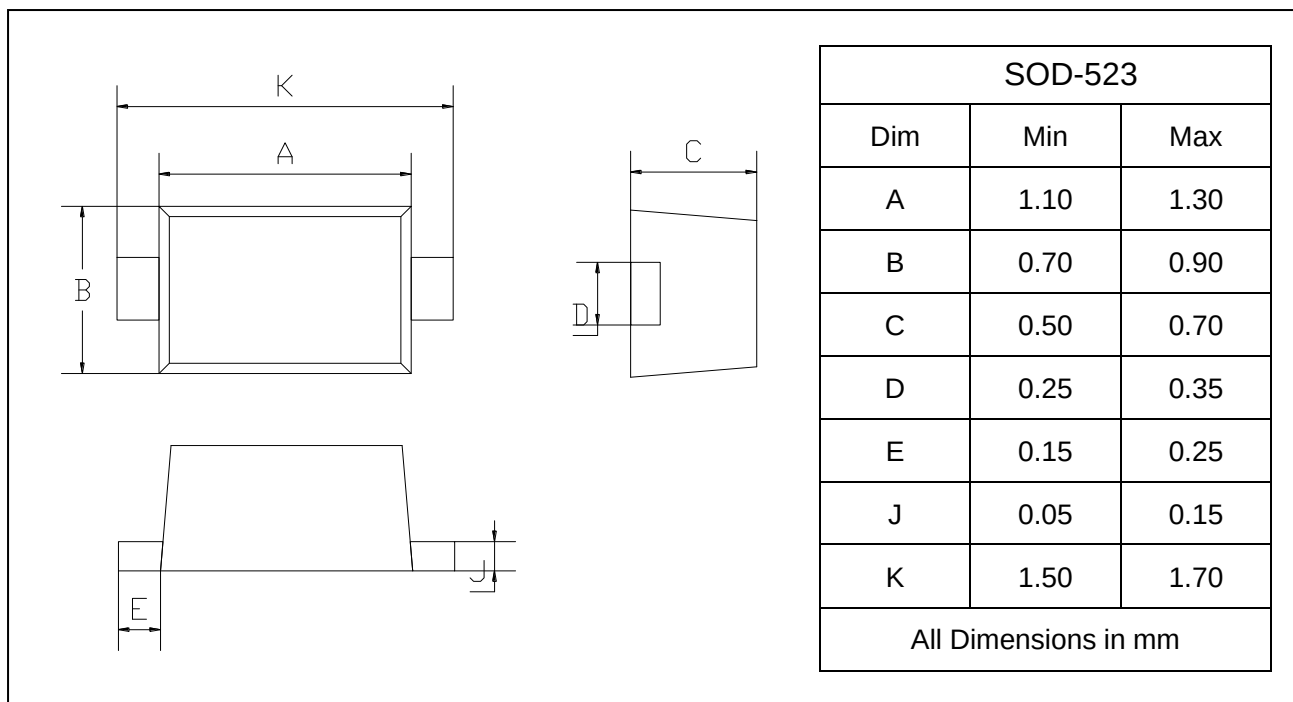
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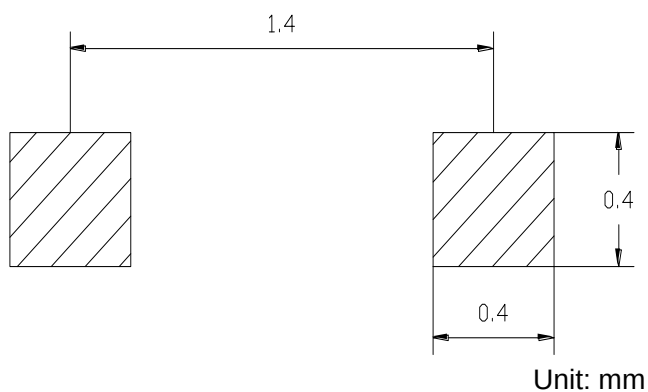
PACKAGE OUTLINE

Plastic surface mounted package

SOD-523



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
GESD36VS1D5	SOD-523	3000pcs / Tape & Reel