

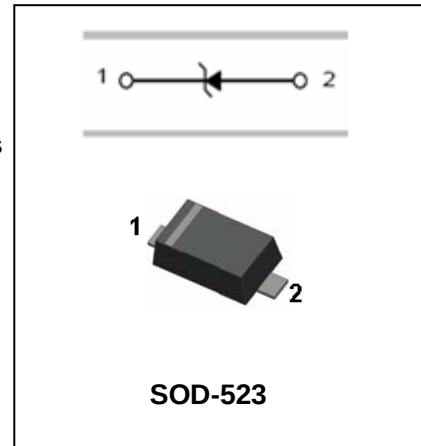
Single Line TVS Diode

TGESD36VD5

FEATURES

- 120 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
- Transient Protection for Data&Power Lines to
IEC 61000-4-2 (ESD) $\pm 30kV$ (air), $\pm 30kV$ (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- Halogen free
- Qualified to AEC-Q101 Standards for High Reliability

HF



APPLICATIONS

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

ORDERING INFORMATION

Type No.	Marking	Package Code
TGESD36VD5	MP	SOD-523

MAXIMUM RATING @ $T_a=25^\circ C$ 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}	120	W
Peak pulse current($t_p=8/20\mu s$)	I_{PP}	4	A
ESD According to IEC61000-4-2 Air	V_{ESD}	30	kV
ESD According to IEC61000-4-2 Contact Discharge		30	
Junction temperature	T_J	150	$^\circ C$
Storage temperature range	T_{STG}	-50 to +150	$^\circ C$

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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	$V_R=0V, f=1MHz$		30	35	pF
Clamping voltage	$V_{(CL)}$	$I_{PP}=1A$			65	V

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

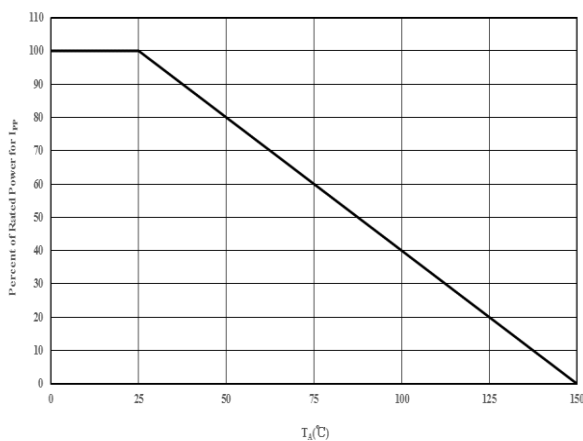


Fig1. Power Derating Curve

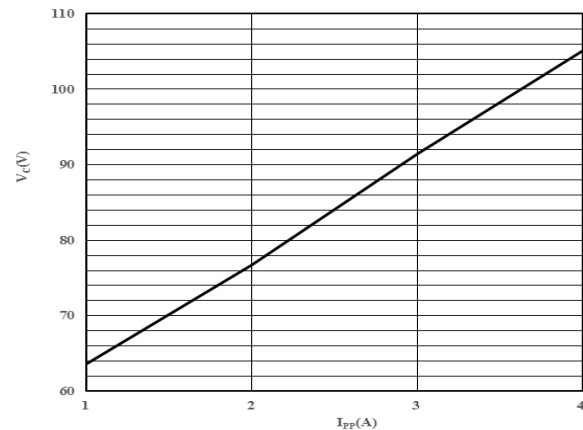


Fig2. Clamping Voltage vs. Peak Pulse Current

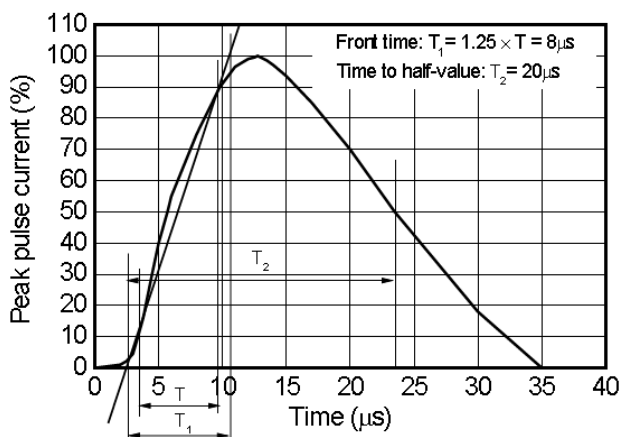


Fig3. 8/20 μs waveform per IEC61000-4-5

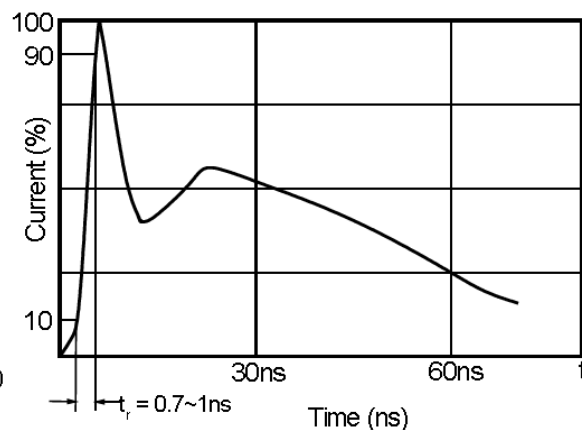


Fig4. ESD pulse waveform according to IEC61000-4-2

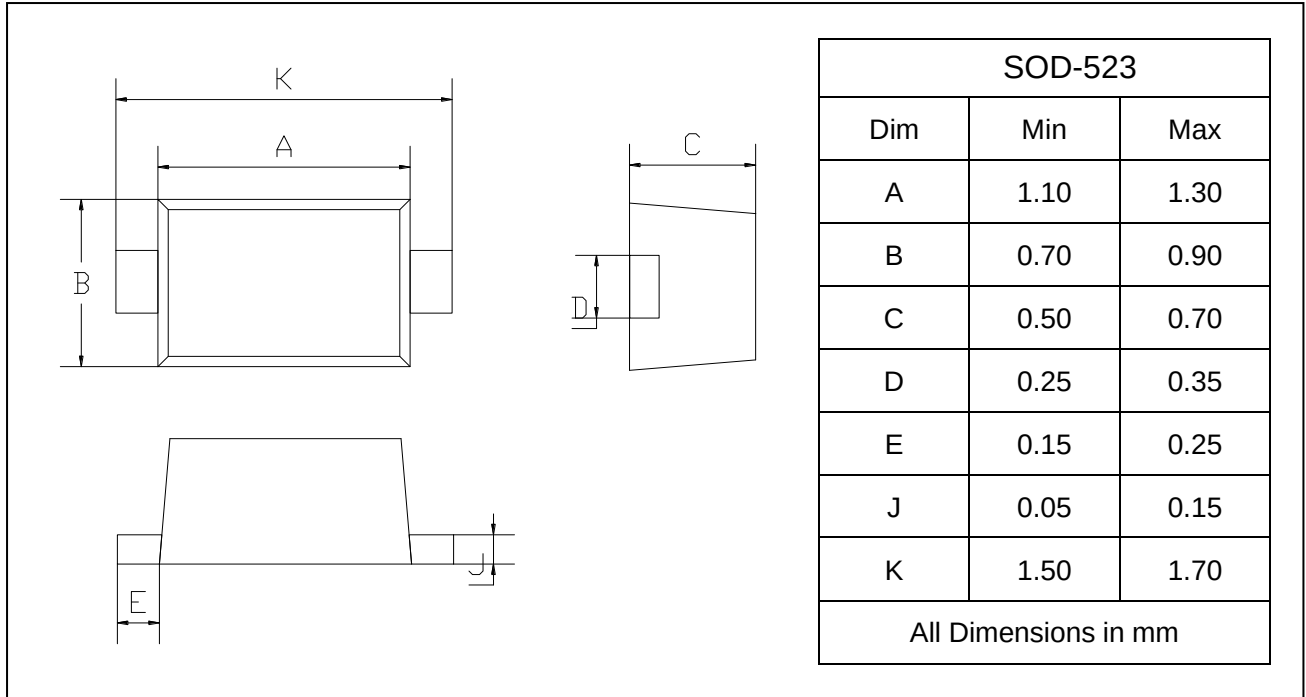
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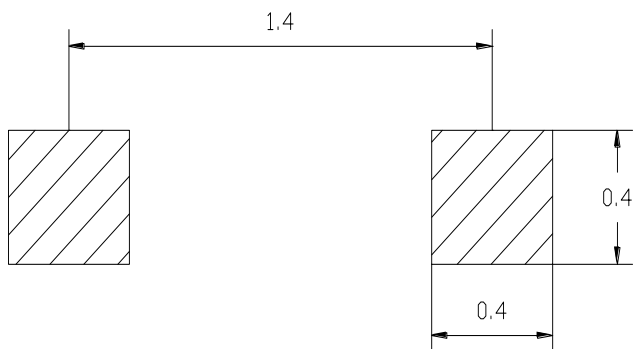
PACKAGE OUTLINE

Plastic surface mounted package

SOD-523



SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

Device	Package	Shipping
TGESD36VD5	SOD-523	3000pcs / Tape & Reel