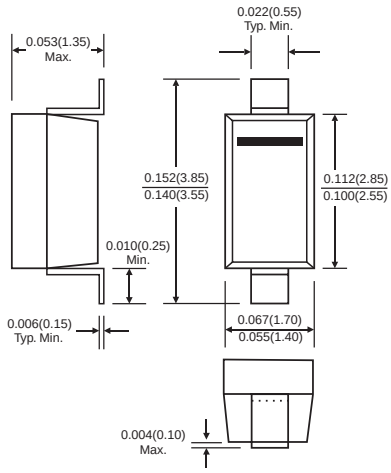
GESD5V0D1

Single Line TVS Diode

SOD-123



Dimensions in inches and (millimeters)

FEATURES

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

Lead-free

APPLICATIONS

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

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

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

GESD5V0D1

Single Line TVS Diode

ELECTRICAL CHARACTERISTICS @ Ta=25℃ 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 I_R=1mA I_R=1mA I_R=1mA I_R=0.5mA			400 80 200 225 300	Ω

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

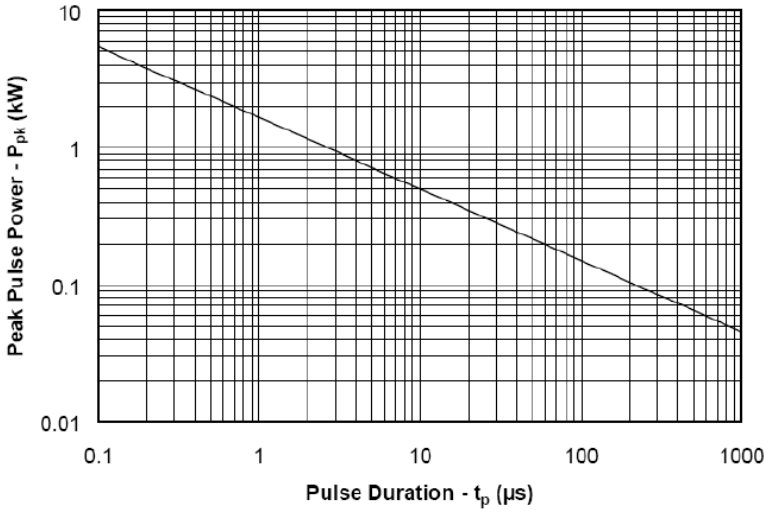


Fig.1 Non-Repetitive Peak Pulse Power vs. Pulse Time

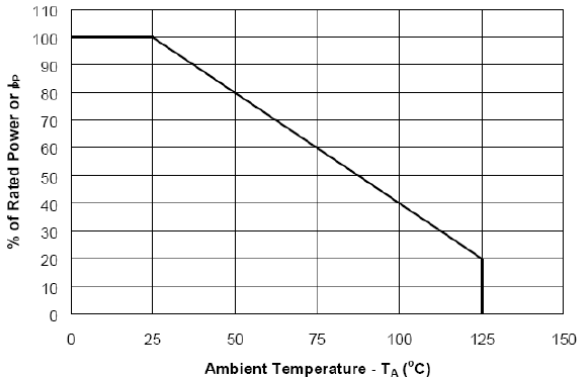


Fig.2 Power Derating Curve

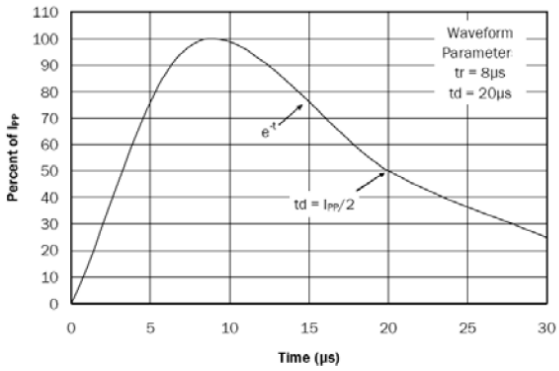


Fig.3 Waveform