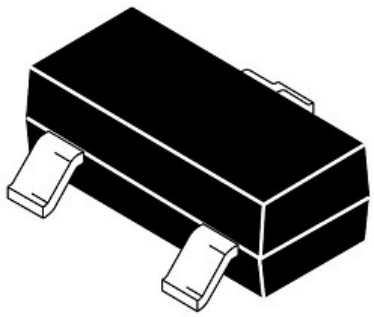
TLSD2.8GU

Low Voltage TVS Diode For ESD and Latch-Up Protection

APPLICATIONS

- 10/100 Ethernet
- WAN/LAN Equipment
- Laser Diode Protection
- Switching Systems
- Instrumentation
- Base Stations

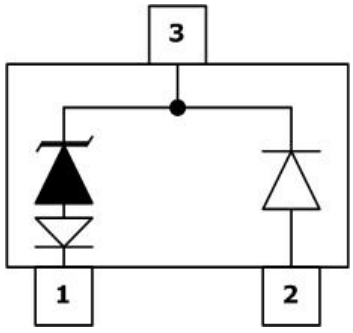
SOT-23



IEC COMPATIBILITY

- IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
- IEC61000-4-4 (EFT) 40A (5/50 ηs)
- IEC61000-4-5 (Lightning) 21A (8/20μs)

PIN CONFIGURATION



FEATURES

- 400 Watts Peak Pulse Power per Line (tp=8/20μs)
- Protects two line pairs (four lines)
- Low capacitance
- RoHS Compliant

MECHANICAL CHARACTERISTICS

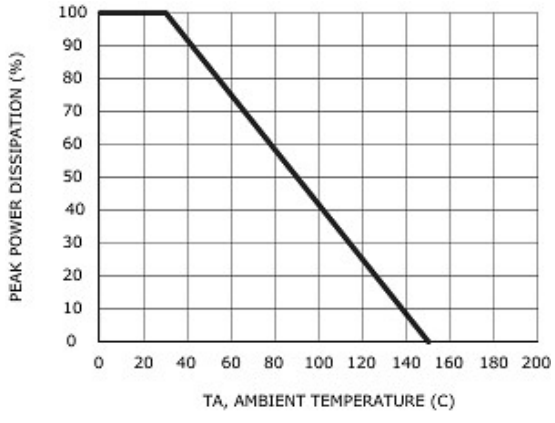
- JEDEC SOT-23 Package
- Molding Compound Flammability Rating : UL 94V-O
- Weight 8 Millgrams (Approximate)
- Quantity Per Reel : 3,000pcs
- Reel Size : 7 inch
- Lead Finish : Lead Free

TLSD2.8GU

DEVICE CHARACTERISTICS

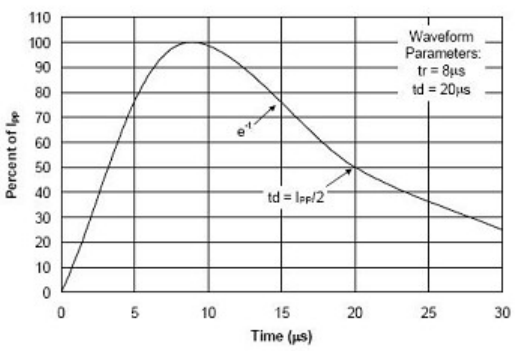
MAXIMUM RATINGS (@ 25℃ Unless Otherwise Specified)			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20μs waveform)	P_{PP}	400	Watts
Lead Soldering Temperature	T_L	260 (10 sec.)	℃
Operating Temperature Range	T_J	-55 ~ 150	℃
Storage Temperature Range	T_{STG}	-55 ~ 150	℃

ELECTRICAL CHARACTERISTICS PER LINE (@ 25℃ Unless Otherwise Specified)									
PART NUMBER	DEVICE MARKING	V_{RWM} (V) (max.)	V_B (V) (min.)	I_T (mA)	V_C @2A (max.)	V_C (max.)	(@A)	I_R (μA) (max.)	C_T (pF) (typ.)
TLSD2.8GU	328	2.8	3.0	1	5.5	8.5	5	1	3

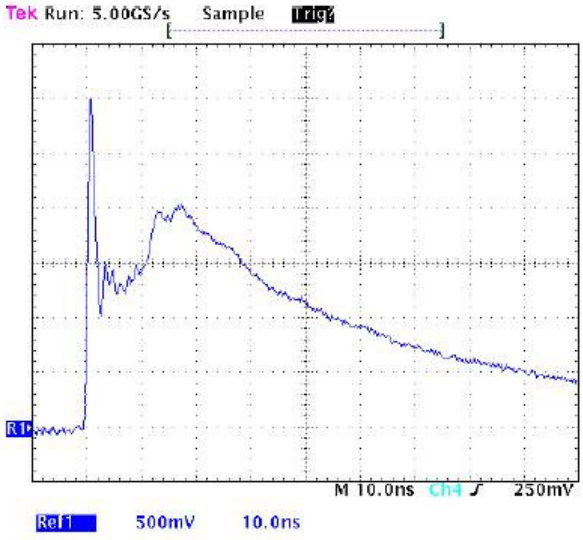


Power Derating Curve

Pulse Waveform

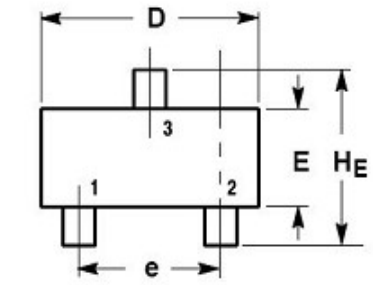


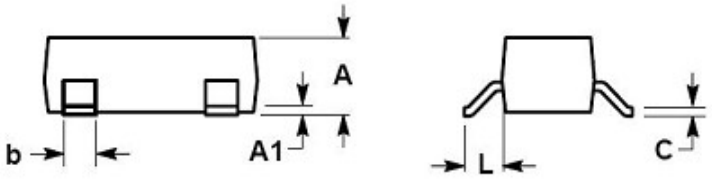
ESD Pulse Waveform (Per IEC 61000-4-2)



TLSD2.8GU

SOT-23 PACKAGE OUTLINE & DIMENSIONS





DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.89	1.00	1.11	0.035	0.040	0.044
A1	0.01	0.06	0.10	0.001	0.002	0.004
b	0.37	0.44	0.50	0.015	0.018	0.020
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.90	3.04	0.110	0.114	0.120
E	1.20	1.30	1.40	0.047	0.051	0.055
e	1.78	1.90	2.04	0.070	0.075	0.081
L	0.35	0.54	0.69	0.014	0.021	0.029
H_E	2.10	2.40	2.64	0.083	0.094	0.104

* SOLDERING FOOTPRINT

