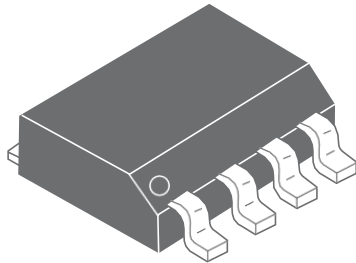
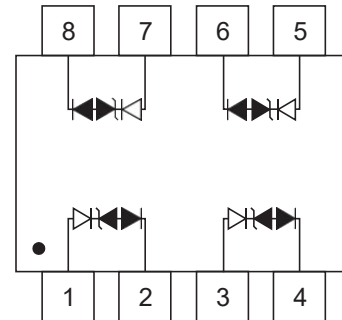


Electro-Static Discharge TLSD2.8K4B Low Capacitance TVS Diode

SOP-08



Pin Configuration



Features

- 400 Watts Peak Pulse Power per Line ($t_p=8/20\mu s$)
- Protects two line pairs (four lines)
- Low capacitance
- RoHS Compliant
- MSL 2

IEC Compatibility

- IEC61000-4-2 (ESD) $\pm 15kV$ (air), $\pm 8kV$ (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- IEC61000-4-5 (Lightning) 24A (8/20 μs)

Applications

- 10/100/1000 Ethernet
- WAN/LAN Equipment
- Test & Measurement Equipment
- Switching Systems
- Instrumentation
- Audio/Video Inputs

Mechanical Characteristics

- JEDEC SOP-08 Package
- Molding Compound Flammability Rating:UL 94V-O
- Weight 70 Milligrams(Approximate)
- Quantity Per Reel:2500pcs
- Reel Size:7 inch
- Lead Finish:Lead Free

Maximum Ratings(T=25℃ unless otherwise specified)

Parameter	Symbol	Value	Units
Peak Pulse Power(tp=8/20μs)	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(T=25℃ unless otherwise specified)

TLSD2.8K4B(Marking:SLVU 2.8-4)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-off Voltage	V _{RWM}				2.8	V
Breakdown Voltage	V _{BR}	I _T =1mA	3.0			V
Clamping Voltage	V _C	I _{PP} =1A, tp=8/20μs			8.5	V
		I _{PP} =10A, tp=8/20μs			15	V
Reverse Leakage Current	I _R	@V _{RWM}			1	μA
Junction Capacitance	C _{I/O}	0Vdc, f=1MHz Between I/O Pins and GND		3		pF

Ratings and Characteristic Curves

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

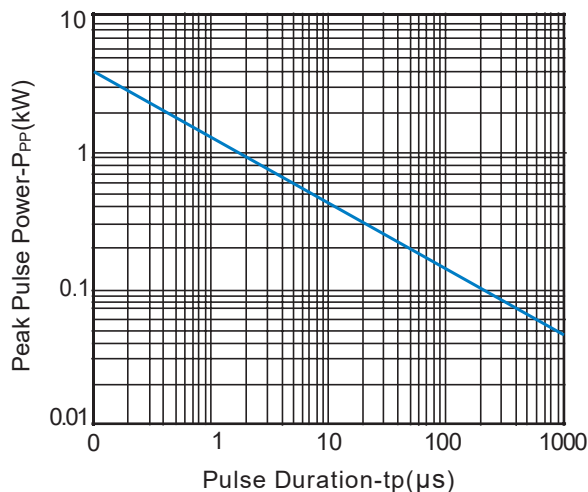
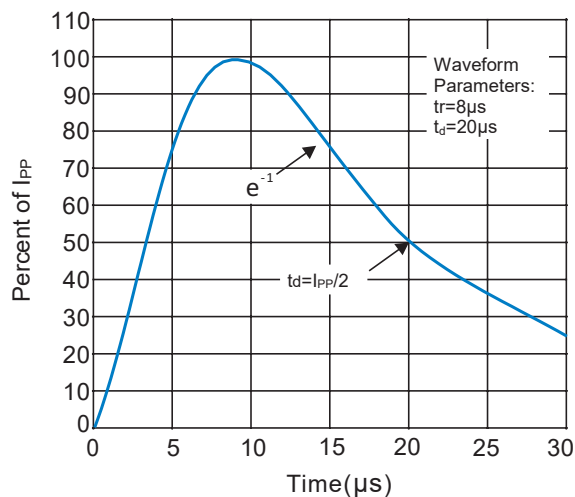
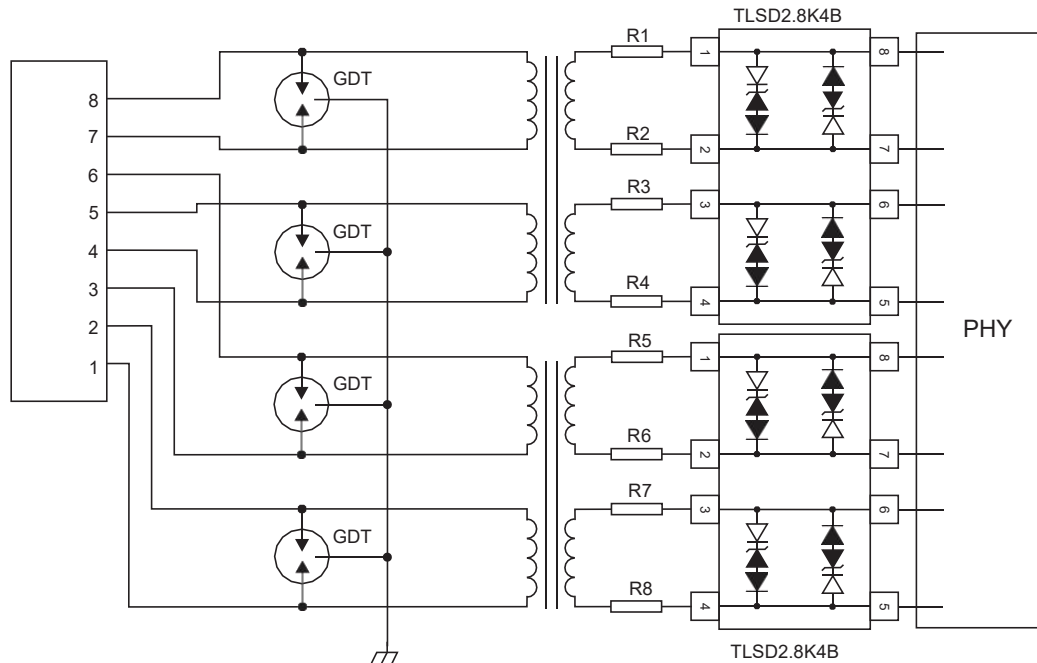


Fig.2 Pulse Waveform

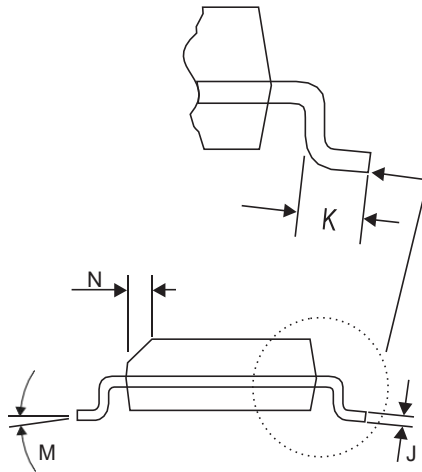
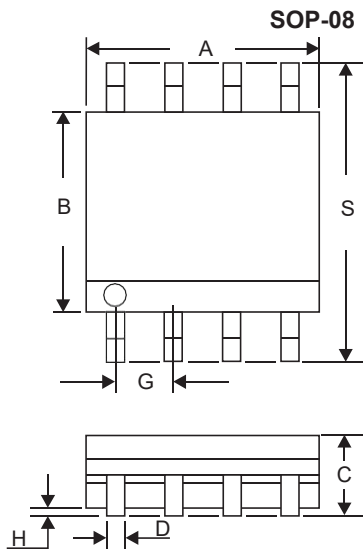


Application

RJ45 Protection

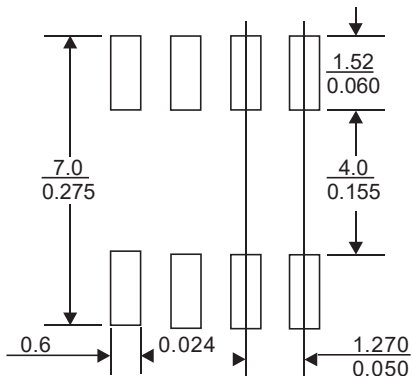


Dimensions(SOP-08)



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	4.80	5.00	0.189	0.197
B	3.80	4.00	0.150	0.157
C	1.35	1.75	0.053	0.069
D	0.33	0.51	0.013	0.020
G	1.27 BSC		0.050 BSC	
H	0.10	0.25	0.004	0.010
J	0.19	0.25	0.007	0.010
K	0.40	1.27	0.016	0.050
M	0°	8°	0°	8°
N	0.25	0.50	0.010	0.020
S	5.80	6.20	0.228	0.244

Recommended Mounting Pad Layout



Dimensions in (millimeters)
inches