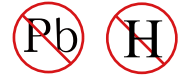


**Low Capacitance TVS for ESD Array Protection Diode****Features**

- 600 Watts peak pulse power ($t_p = 8/20\mu s$)
- Protects two line pairs (four lines)
- Low capacitance
- Working voltages : 2.8V
- Low leakage current
- Response Time is $< 1\text{ ns}$
- Low capacitance ($< 3.0\text{pF}$) for high-speed interfaces
- Meets MSL 1 Requirements
- Solid-state silicon avalanche technology
- ROHS compliant

Main applications

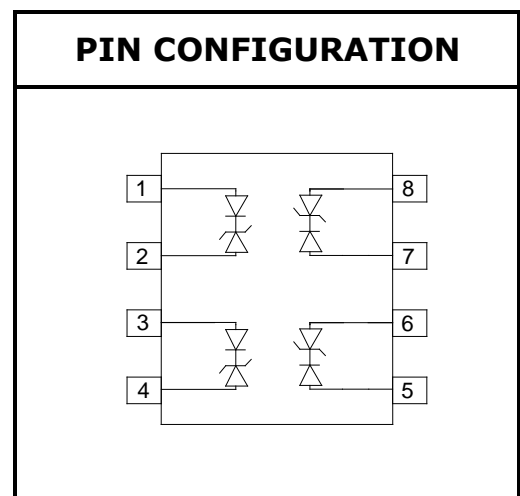
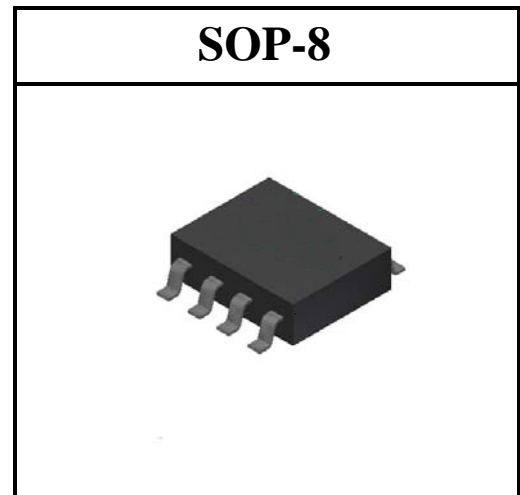
- 10/100/1000 Ethernet
- WAN/LAN Equipment
- Switching Systems
- Instrumentation
- Base Stations
- Analog Inputs

Protection solution to meet

- IEC61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- IEC61000-4-5 (Lightning) 25A (8/20 μs)

Ordering Information

Device	Qty per Reel	Reel Size
YSLVU2.8-4	2500	13 Inch



DEVICE CHARACTERISTICS

YSLVU2.8-4

Maximum ratings (Tamb=25°C Unless Otherwise Specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (tp=8/20μs waveform)	P _{PPP}	600	Watts
Peak Pulse Current(tp=8/20μs waveform)	I _{PP}	25	A
ESD Rating per IEC61000-4-2:	Contact	8	KV
	Air	15	
Lead Soldering Temperature	T _L	260 (10 sec.)	°C
Operating Temperature Range	T _J	-55 ~ 150	°C
Storage Temperature Range	T _{STG}	-55 ~ 150	°C

Maximum ratings are those values beyond which device damage can occur. Maximum ratings applied to the device are individual stress limit values (not normal operating conditions) and are not valid simultaneously. If these limits are exceeded, device functional operation is not implied, damage may occur and reliability may be affected.

*Other voltages may be available upon request.

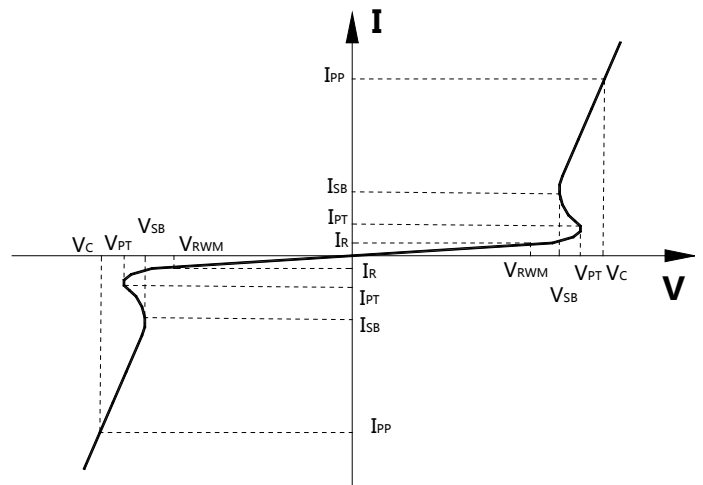
1. Non-repetitive current pulse, per Figure 1.

Electrical characteristics (Tamb=25°C Unless Otherwise Specified)

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Units
V _{RWM}	Reverse Working Voltage				2.8	V
V _{PT}	Punch-Through Voltage	I _{PT} = 2μA, (Each Line)	3.0			V
V _{SB}	Snap-Back Voltage	I _{SB} = 50mA, (Each Line)	2.8			
I _R	Reverse Leakage Current	V _{RWM} = 2.8V, (Each Line)			1	μA
V _C	Clamping Voltage	I _{PP} = 1A, tp = 8/20μs, (Each Line)			7.6	V
		I _{PP} = 24A, tp = 8/20μs, (Each Line)			25	V
I _{PP}	Peak Pulse Current	tp = 8/20μs(Each Line)			25	A
C _J	Junction Capacitance	V _R = 0V, f = 1MHz, (Each Line)		1.5	3.0	pF

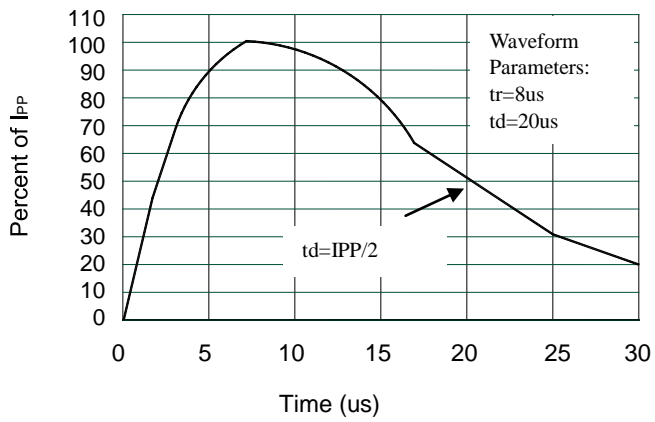
Junction capacitance is measured in VR=0V,F=1MHz

Symbol	Parameter
V _{RWM}	Working Peak Reverse Voltage
V _{PT}	Punch-Through Voltage@ I _{PT}
V _{SB}	Snap-Back Voltage@ I _{SB}
V _C	Clamping Voltage @ I _{PP}
I _T	Test Current
I _{RM}	Leakage current at V _{RWM}
I _{PP}	Peak pulse current
C _O	Off-state Capacitance
C _J	Junction Capacitance

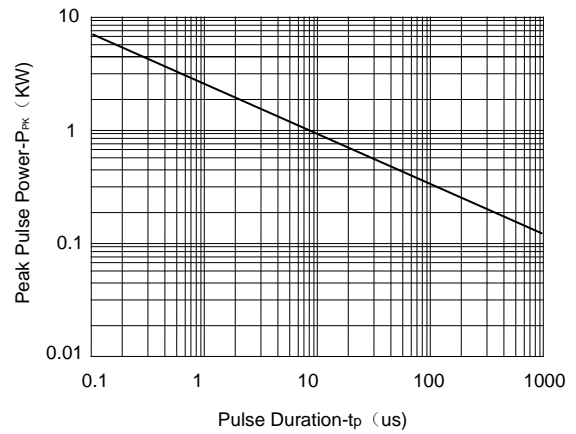


DEVICE CHARACTERISTICS

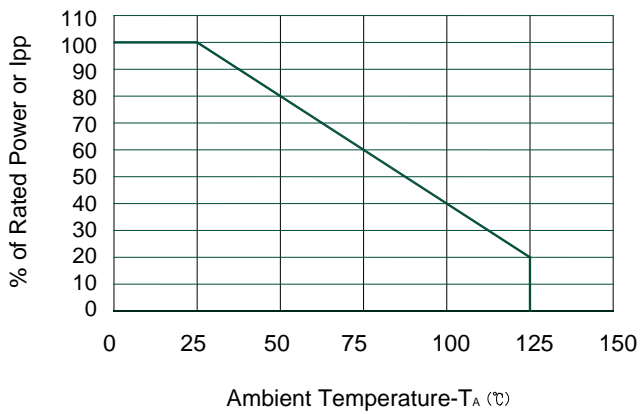
YSLVU2.8-4



Pulse Waveform



Non-Repetitive Peak Pulse Power vs. Pulse Time

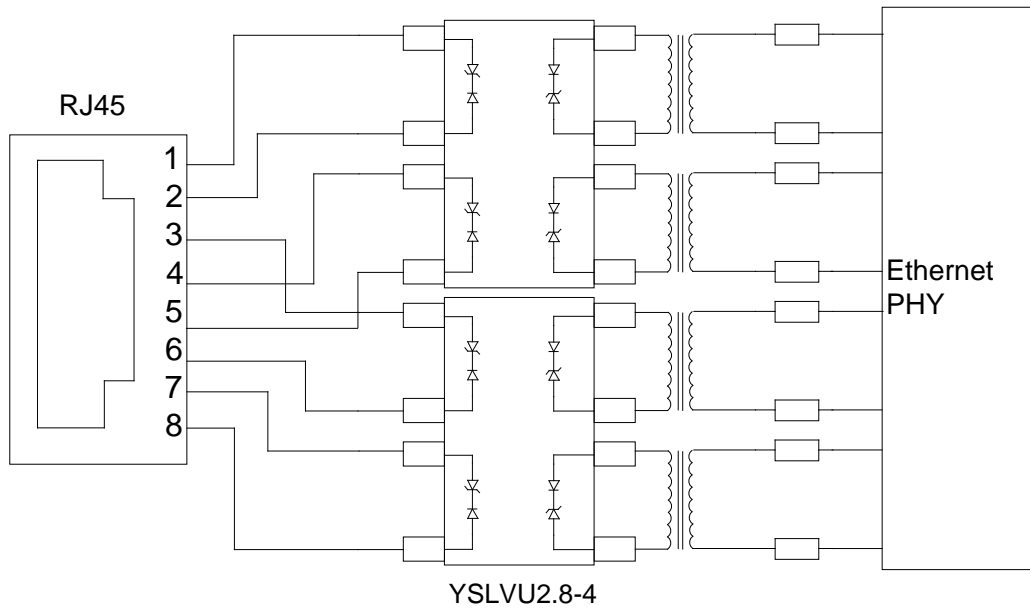


Power Derating Curve

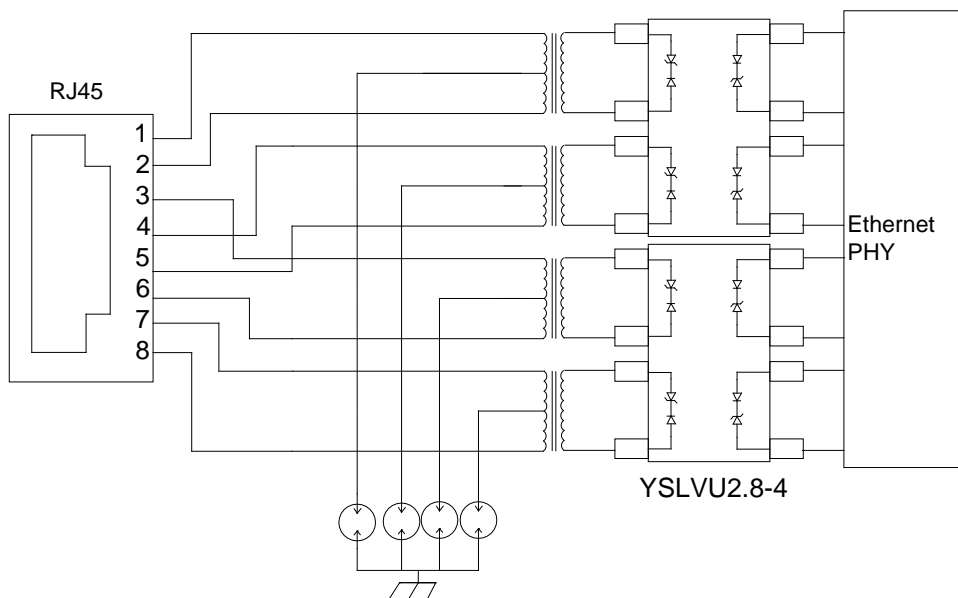
DEVICE CHARACTERISTICS

YSLVU2.8-4

Typical applications



Surge protection for Ethernet



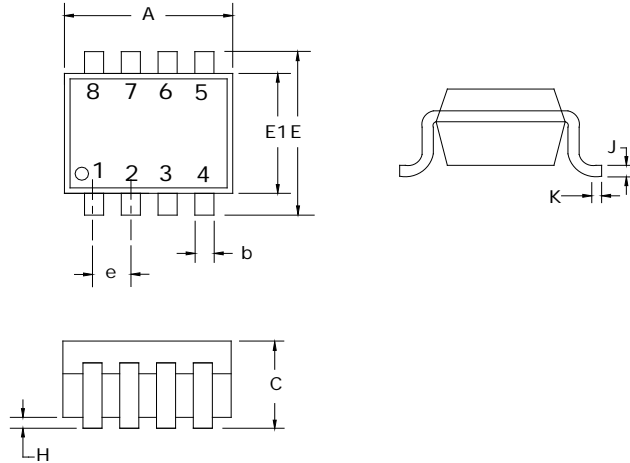
PACKAGE OUTLINE & DIMENSIONS

YSLVU2.8-4

Mechanical Data

Case: SOP-8

Case Material: Molded Plastic. UL Flammability



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	4.80	5.00	0.189	0.197
E	6.00(BSC)		0.236(BSC)	
E1	3.80	4.00	0.150	0.157
b	0.33	0.51	0.013	0.020
C	1.35	1.75	0.053	0.069
J	0.17	0.25	0.007	0.010
e	1.27(BSC)		0.05(BSC)	
K	0.40	1.27	0.016	0.050
H	0.10	0.25	0.004	0.010

Recommended Pad outline

