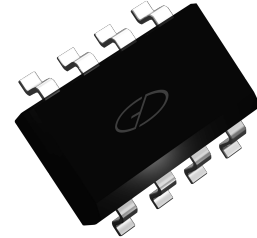


### Features

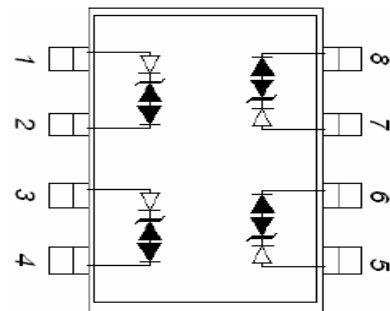
- 400 Watts Peak Pulse Power per Line (tp=8/20µs)
- SOP-8 package
- Protects two line pairs(fours lines)up to Eight (8) Lines
- Low leakage current and clamping voltage
- Low capacitance
- RoHS compliant
- Transient protection to  
 IEC 61000-4-2(ESD) ±15 KV(air), ±8KV(contact);  
 IEC 61000-4-4 (EFT) 40A (5/50ns)  
 IEC 61000-4-5(Lightning) 24A (8/20us)



Package: SOP-8

### Applications

- Video/Audio input
- WAN/LAN Equipment
- PDAs
- Ethernet - 10/100/1000 Base T
- Desktops, Servers, Notebooks & Handhelds, base stations Laser Diode Protection



Schematic Diagram

### Absolute Maximum Ratings (T<sub>A</sub>=25°C unless otherwise specified)

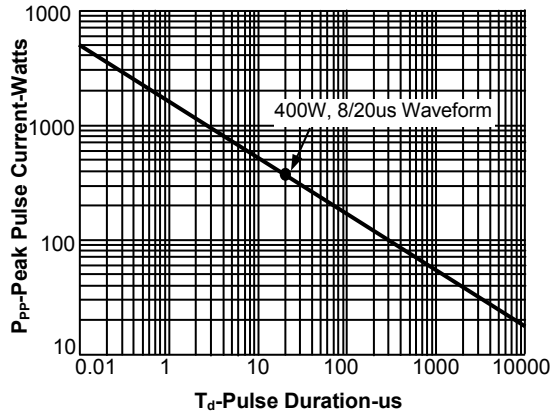
Parameter	Symbol	Value	Unit
Peak Pulse Power (T <sub>P</sub> =8/20µS)	P <sub>PP</sub>	400	W
Peak Pulse Current ( T <sub>P</sub> = 8/20µS )	I <sub>PP</sub>	24	A
Junction Temperature	T <sub>J</sub>	-55 to +125	°C
Storage Temperature	T <sub>STG</sub>	-55 to +150	°C

### Electrical Characteristics per line (T<sub>A</sub>=25°C unless otherwise specified)

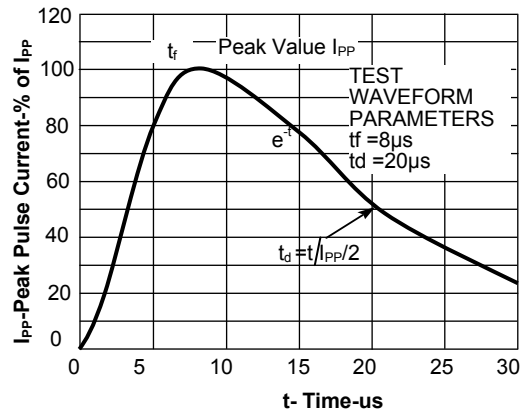
Parameter	Symbols	Conditions	Min	Typ	Max	Units
Reverse stand-off Voltage	V <sub>RWM</sub>	-	-	-	2.8	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>T</sub> =1mA	3	-	-	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> =2.8V	-	-	1	µA
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> =2A, T <sub>P</sub> =8/20µs	-	-	6.5	V
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> =24A, T <sub>P</sub> =8/20µs	-	-	18	V
Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> =0V, f=1MHz	-	3.5	-	pF

**Typical Characteristic Curves**

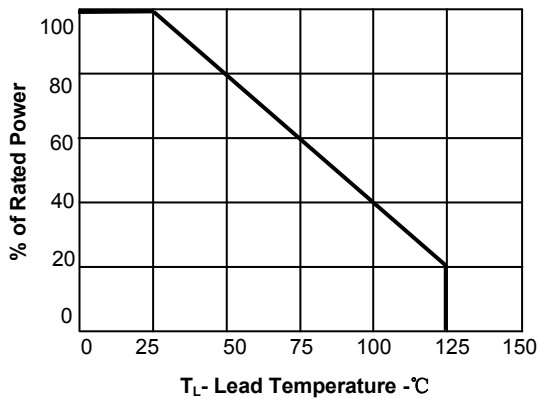
**Fig.1 Peak Pulse Power vs Pulse Time**



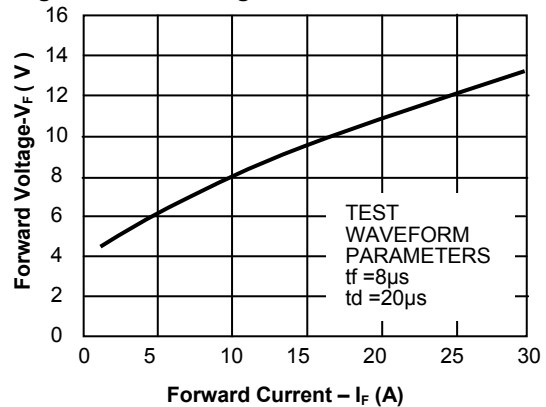
**Fig.2 Pulse Wave Form - 8/20μs**



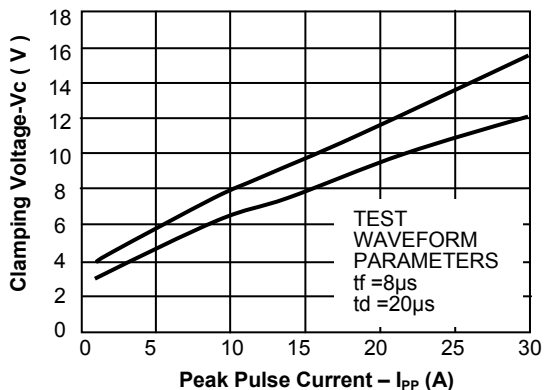
**Fig.3 Power Derating Curve**



**Fig.4 Forward Voltage vs. Forward Current**

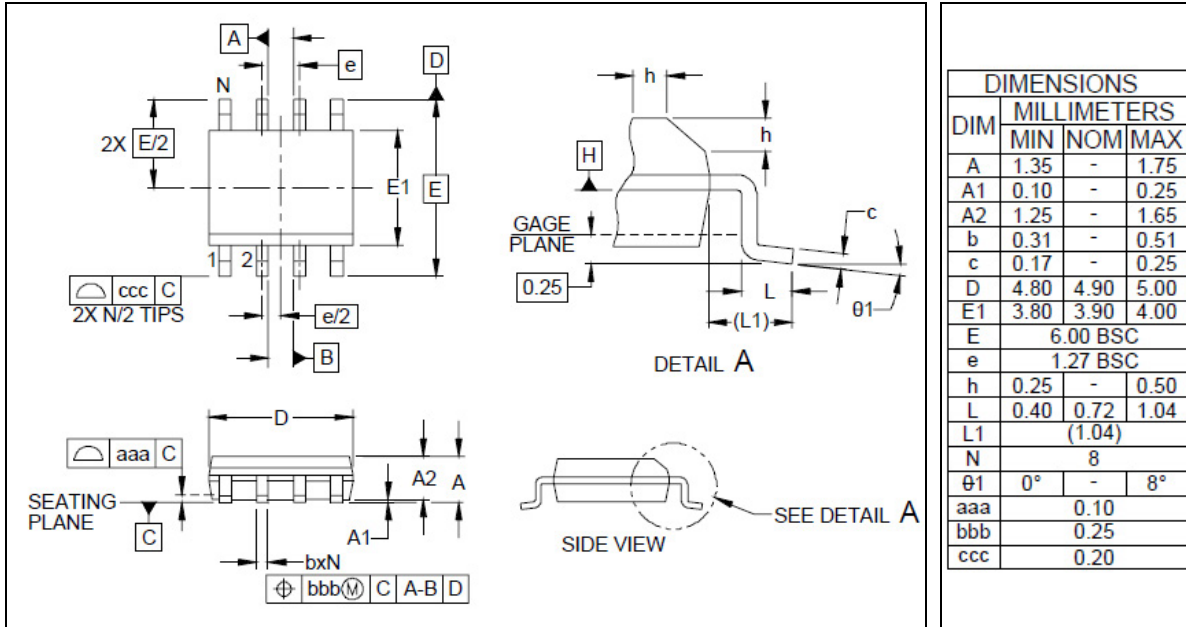


**Fig.5 Clamping Voltage vs. Peak Pulse Current**



**Product Dimensions**

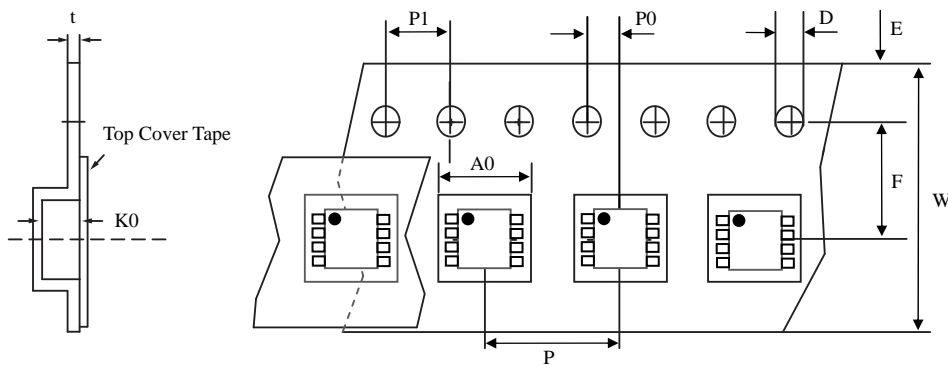
SOP-8



**NOTES:**

1. CONTROLLING DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES).
2. DATUMS **-A-** AND **-B-** TO BE DETERMINED AT DATUM PLANE **-H-**
3. DIMENSIONS "E1" AND "D" DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.
4. REFERENCE JEDEC STD MS-012, VARIATION AA.

**Package Information**



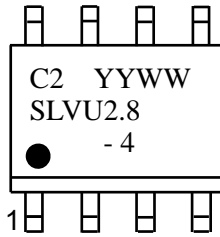
Unit : mm

A0	K0	D	E	F	W	P0	P1	P	t
6.4±0.10	2.10±0.10	1.55±0.05	1.75±0.10	5.50±0.10	12.00±0.30	2.00±0.05	4.00±0.10	8.00±0.10	0.30±0.10

# **GSES2V8P8U**

## **Low Capacitance ESD TVS Array**

### **Marking**



### **Order Information**

<b>Device</b>	<b>Package</b>	<b>Net Weight</b>	<b>Carrier</b>	<b>Quantity</b>	<b>HSF Status</b>
GSES2V8P8U	SOP-8	0.077g	Tape & Reel	2500pcs	RoHS compliant