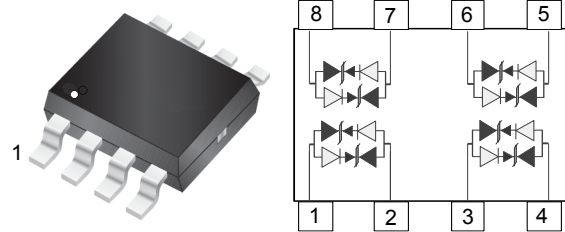


## Low Capacitance ESD TVS Array in SO-8

### Features

- 500Watts peak pulse power ( $t_p = 8/20\mu s$ )
- SO-8 Package
- Protects two line pairs
- Protects Up to four line pairs
- Low clamping voltage
- Low leakage current
- Low capacitance
- Transient protection for high-speed data lines to :
  - IEC 61000-4-2 (ESD)  $\pm 30kV$  (air),  $\pm 30kV$  (contact)
  - IEC 61000-4-4 (EFT) 40A (5/50ns)
  - IEC 61000-4-5 (Lightning) 25A (8/20 $\mu s$ )



### Mechanical Data

- **Case:** SO-8 (plastic package).  
Lead free; RoHS compliant; Halogen free
- **Molding Compound Flammability Rating:**  
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:  
260 °C/10 sec. at terminals

### Applications

- 10/100 Ethernet
- Integrated magnetics/RJ-45 connectors
- LAN/WAN Equipment
- Security Cameras
- Industrial Controls
- Peripherals
- Notebooks & Desktop Computers

### Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

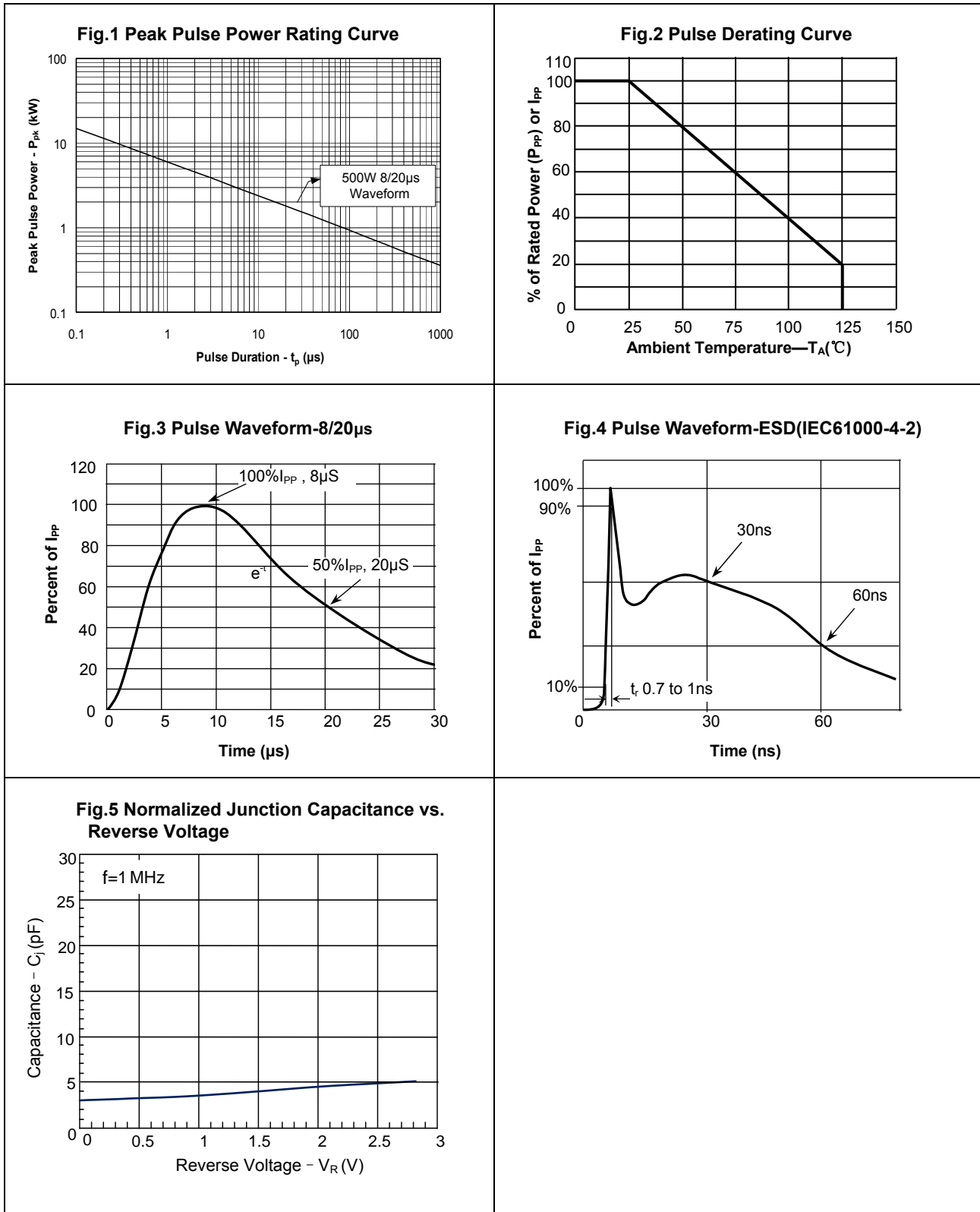
Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_P=8/20\mu s$ )	$P_{PP}$	500	W
ESD contact/air discharge (IEC-61000-4-2)	$V_{ESD}$	30/30	kV
Peak Pulse Current ( $T_P = 8/20\mu s$ )	$I_{PP}$	25	A
Junction Temperature	$T_J$	-55 to +125	°C
Storage temperature	$T_{STG}$	-55 to +150	°C

### Electrical Characteristics

( $T_A = 25\text{ °C}$  unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	$V_{RWM}$				2.8	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	3.0			V
Reverse Leakage Current	$I_R$	$V_R=2.8V$			0.5	$\mu A$
Clamping Voltage	$V_C$	$I_{PP}=5A, T_P=8/20\mu s$		10		V
Clamping Voltage	$V_C$	$I_{PP}=25A, T_P=8/20\mu s$		20		V
Junction Capacitance	$C_J$	$V_R=0V, f=1MHz$		3		pF

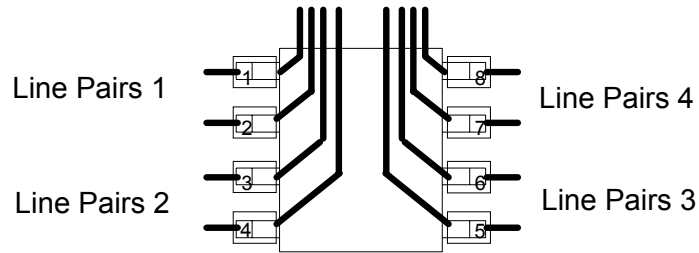
**Typical Characteristics** ( $T_{amb} = 25\text{ }^{\circ}\text{C}$  unless otherwise specified)



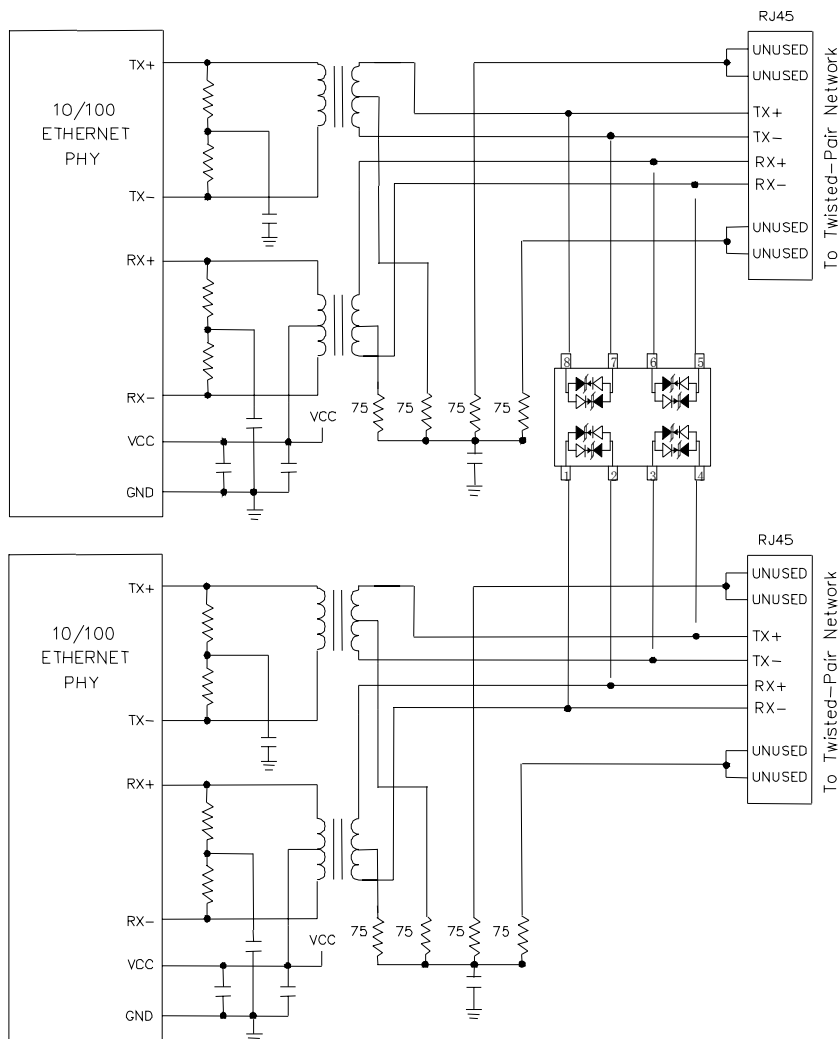
## Application Information

### Device Connection for Protection of Eight Data Lines

Electronic equipment is susceptible to transient disturbances from a variety of sources including: ESD to an open connector or interface, direct or nearby lightning strikes to cables and wires, and charged cables “hot plugged” into I/O ports. The CESD8LVU2.8-8L is designed to protect sensitive components from damage and latch-up which may result from such transient events. The CESD8LVU2.8-8L can be configured to protect four high-speed line pairs differentially, or four lines to ground (common mode). The device is connected as follows:

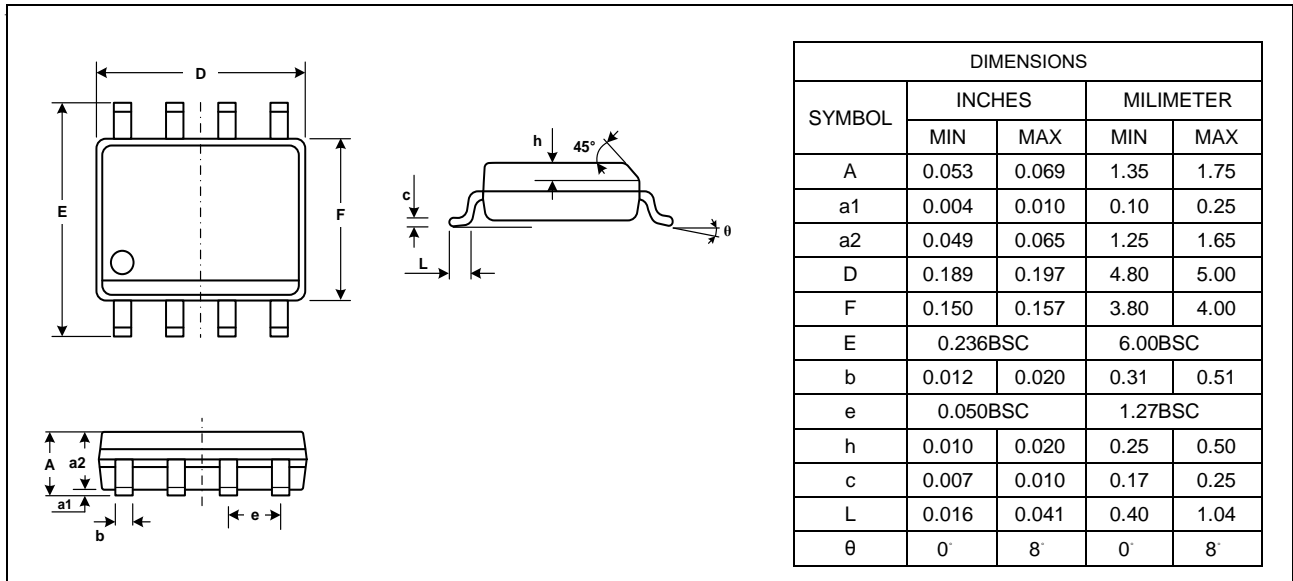


Differential Protection of Four Line Pairs

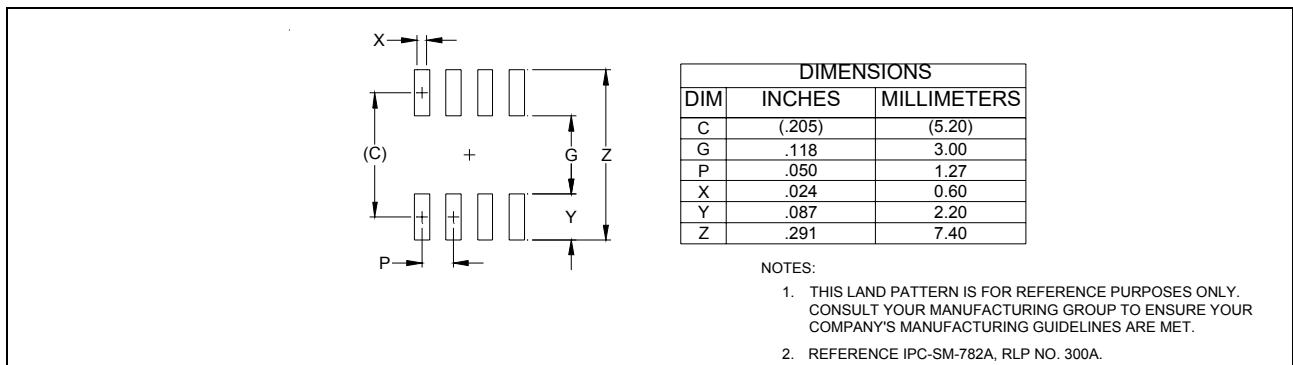


One CESD8LVU2.8-8L Protecting Two 10/100 Ethernet Port

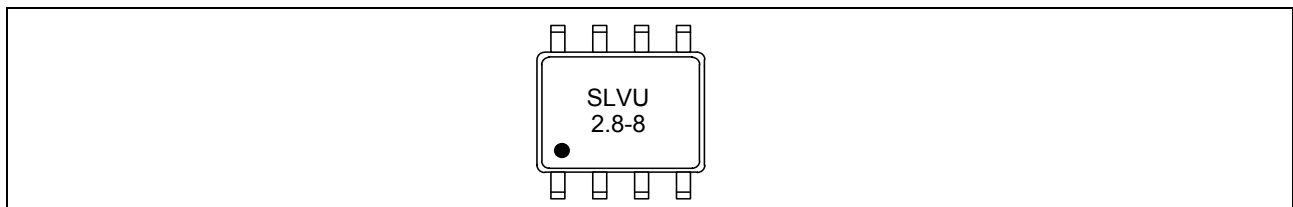
### Package Dimensions



### Pad Dimensions



### Marking



### Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
CESD8LVU2.8-8L	SO-8	Tape and reel	2500pcs / reel	EIA STD RS-481

### Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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