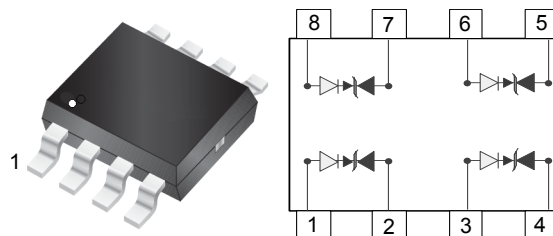


Low Capacitance ESD TVS Array in SO-8

Features

- 500Watts peak pulse power ($t_p = 8/20\mu s$)
- SO-8 Package
- Protects two line pairs
- Protects Up to two Bidirectional I/O lines
- 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) 24A (8/20 μs)



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}	24	A
Junction Temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

($T_A = 25$ °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	μA
Clamping Voltage	V_C	$I_{PP}=5A, T_P=8/20\mu s$			8.5	V
Clamping Voltage	V_C	$I_{PP}=24A, T_P=8/20\mu s$			24	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$		3		pF

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

Fig.1 Peak Pulse Power Rating Curve

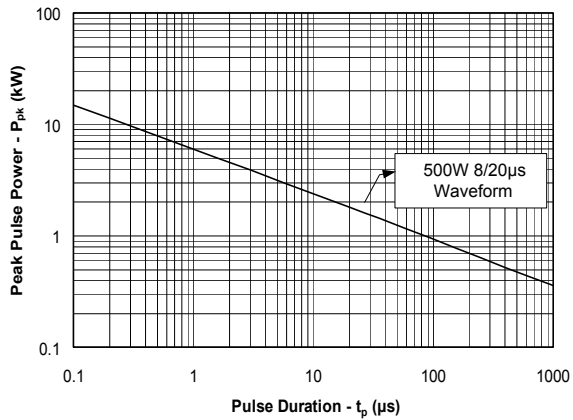


Fig.2 Pulse Derating Curve

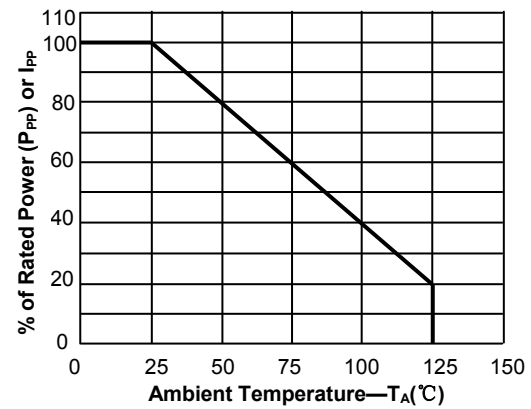


Fig.3 Pulse Waveform-8/20μs

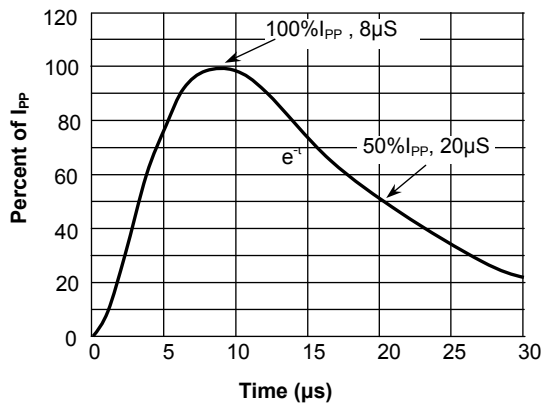


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)

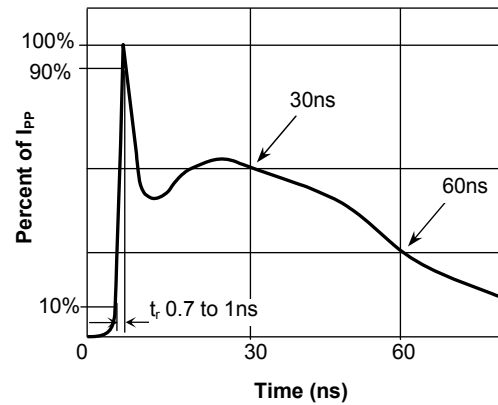
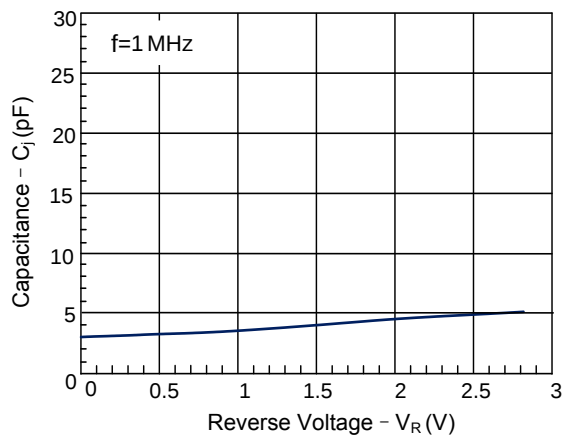
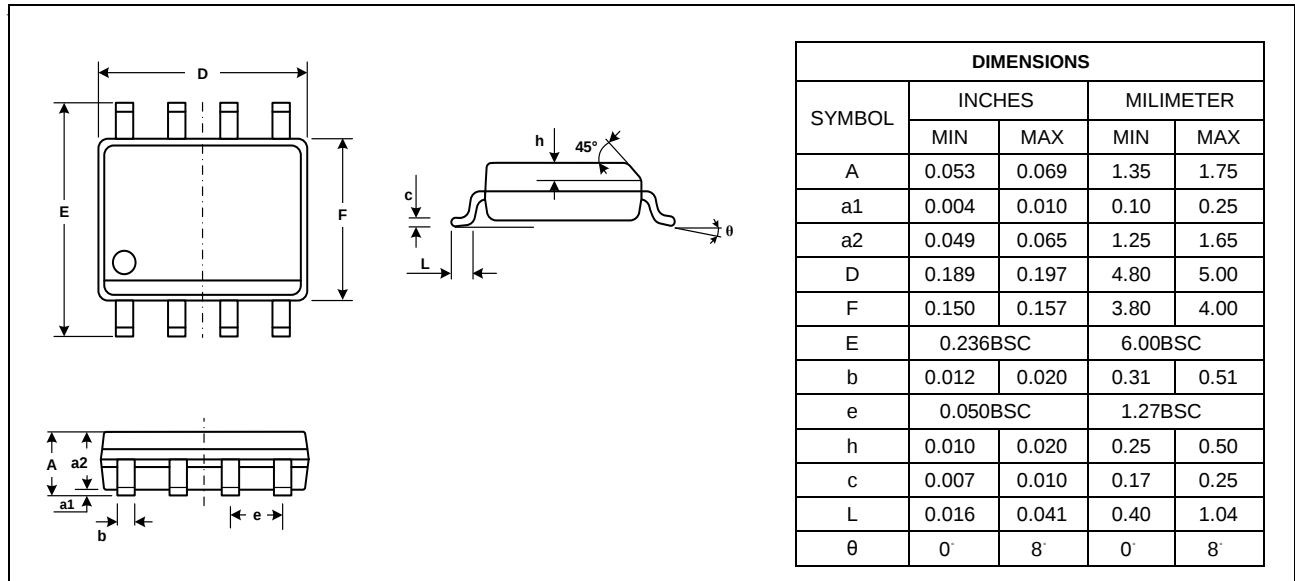


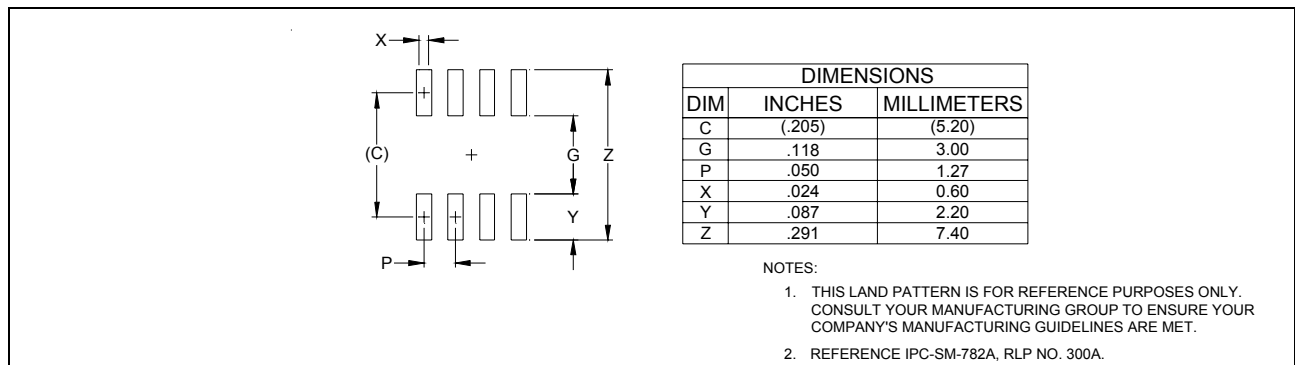
Fig.5 Normalized Junction Capacitance vs. Reverse Voltage



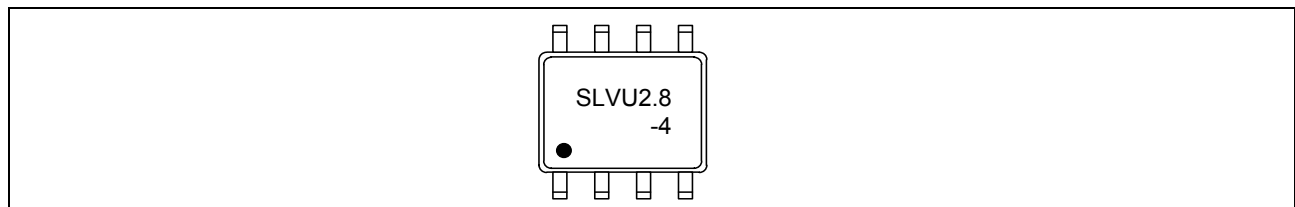
Package Dimensions



Pad Dimensions



Marking



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
CESD8LVU2.8-4	SO-8	Tape and reel	2500pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2012	1.0	Initial release

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