

Transient Voltage Suppressors Array for ESD Protection

Low Capacitance

SLVU2.8-4

Feature

- ◆ With TVS Diode
- ◆ ESD Protection
- ◆ Low Clamping Voltage
- ◆ 400 Watts Peak Pulse Power per Line($t_p=8/20\mu s$)
- ◆ Protection 2 Lines Pairs

Applications

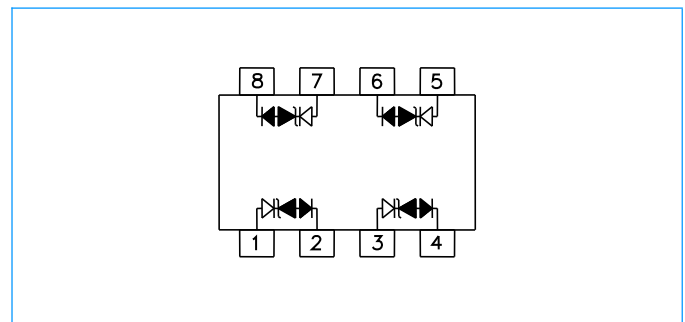
- ◆ WAN/LAN Equipment
- ◆ Wireless Systems
- ◆ Switching Systems
- ◆ High Speed Data Line
- ◆ 10/100 Ethernet
- ◆ Base Stations

IEC Compatibility

- ◆ EN61000-4
- ◆ 61000-4-2(ESD):Level 4,Contact:> $\pm 15kv$,Air:> $\pm 25kv$
- ◆ 61000-4-4(EFT):40A-5/50ns
- ◆ 61000-4-5(Surge):24A,8/20 μs



Functional Diagram



Mechanical Characteristics

- ◆ JEDEC SO-08 Package
- ◆ Molding Compound Flammability Rating : UL 94V-0
- ◆ Quantity Per Reel : 2500pcs
- ◆ Lead Finish : Lead Free

Maximum Ratings @25°C unless otherwise specified

Symbol	Parameter	Value	Units
P_{PP}	Peak Pulse Power ($t_p=8/20\mu s$ waveform)	400	W
T_J	Operating Temperature Range	-55 to +150	°C
T_{STG}	Storage Temperature Range	-55 to +150	°C

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Electrical Characteristics (@ 25°C Unless Otherwise Specified)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Reverse Stand-off Voltage	V_{RWM}	—	—	—	2.8	V
Punch-Through Voltage	V_{PT}	$I_{PT}=2\mu A$	3.0	—	—	V
Snap Back Voltage	V_{SB}	$I_{SB}=50mA$	2.8	—	—	V
Reverse Leakage Current	I_R	$V_{RWM}=2.8V$	—	—	1	μA
Clamping Voltage	V_C	$I_{PP}=2A, t_p=8/20\mu s$ $I_{PP}=5A, t_p=8/20\mu s$ $I_{PP}=24A, t_p=8/20\mu s$	—	—	4.5 5.5 9.0	V
Junction Capacitance	Each Line	$V_{DC}=0V, f=1MHz$	—	5.0	—	pF

Characteristic Curves

Fig1. Non-repetitive Peak pulse power V.S pulse time

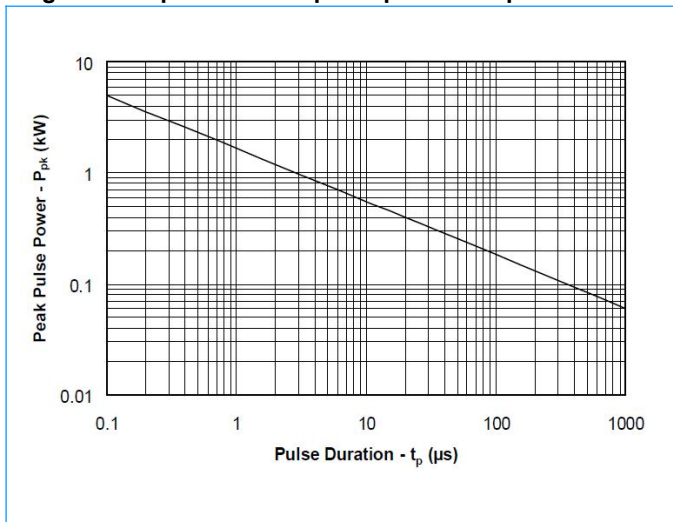
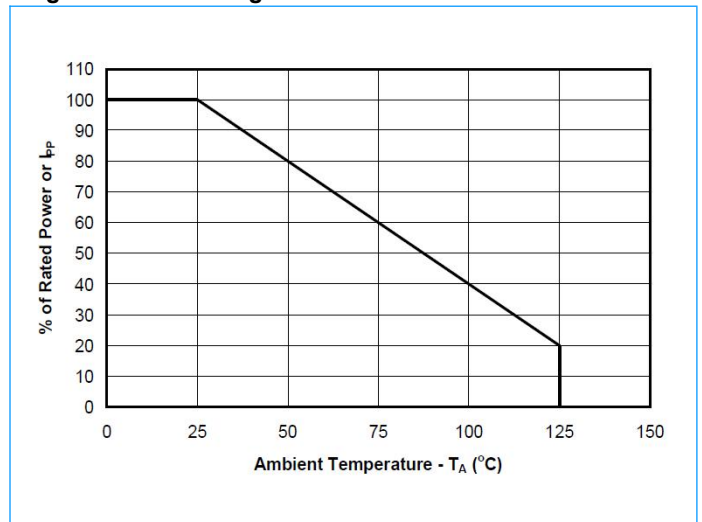


Fig2. Power Derating Curve



Characteristic Curves (Continue)

Fig3. Pulse Waveform

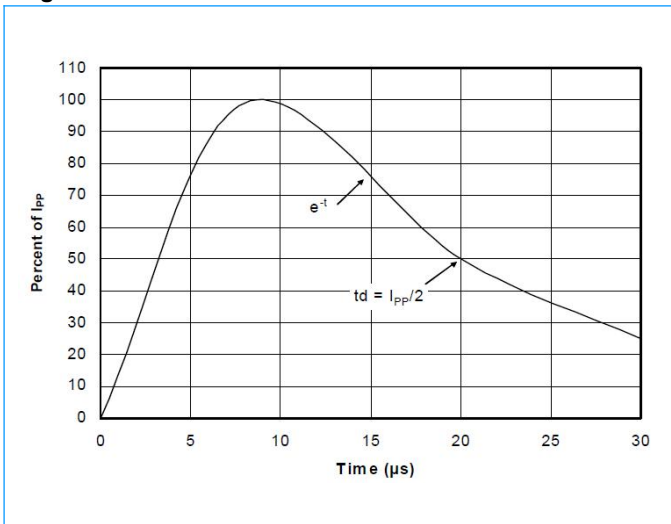


Fig4. Clamping Voltage vs. Peak Pulse Current

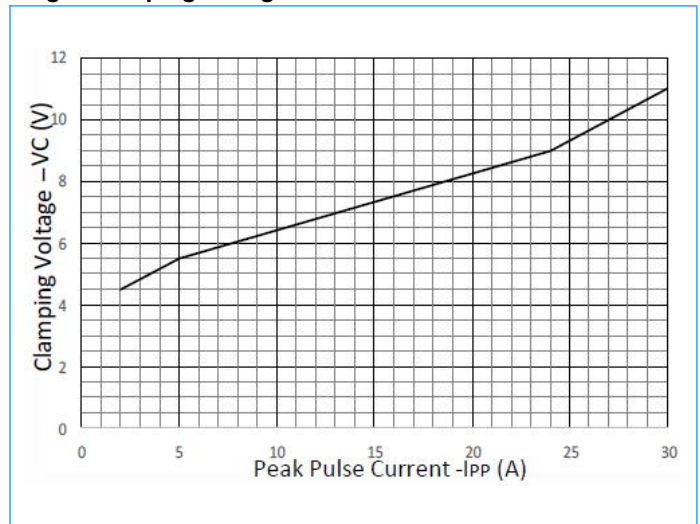
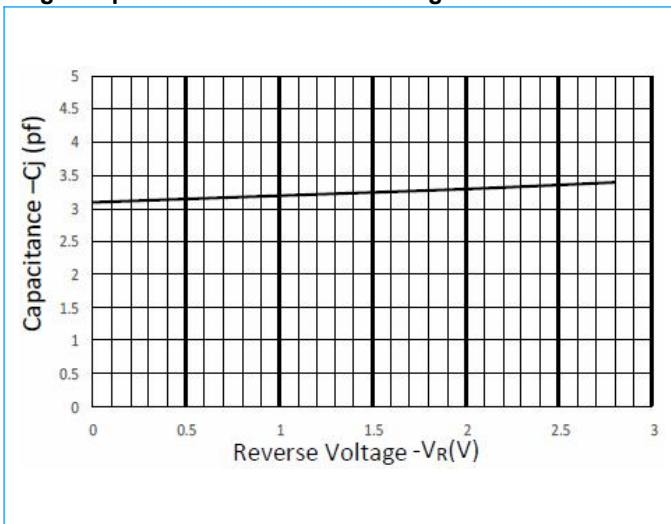
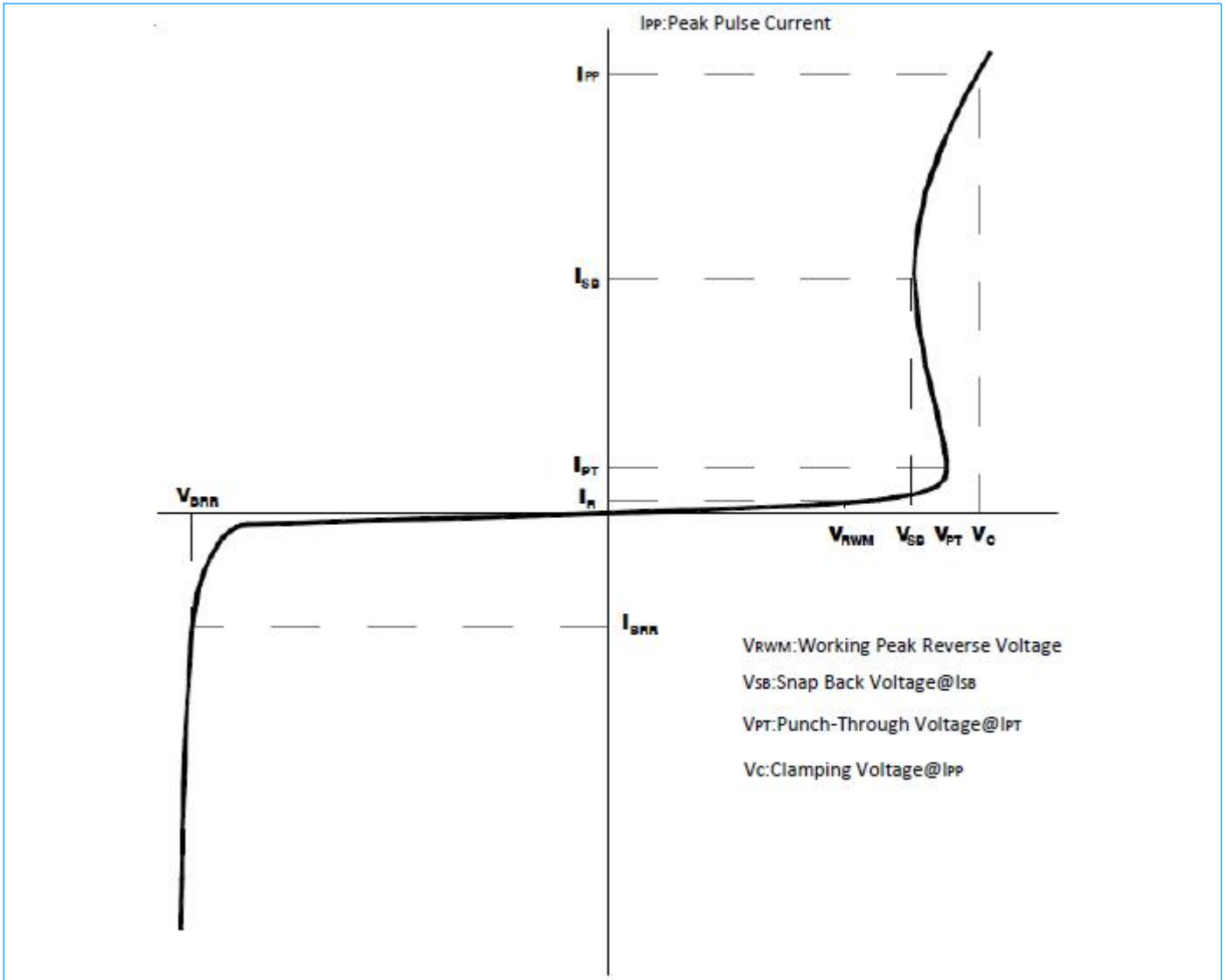


Fig5. Capacitance vs. Reverse Voltage



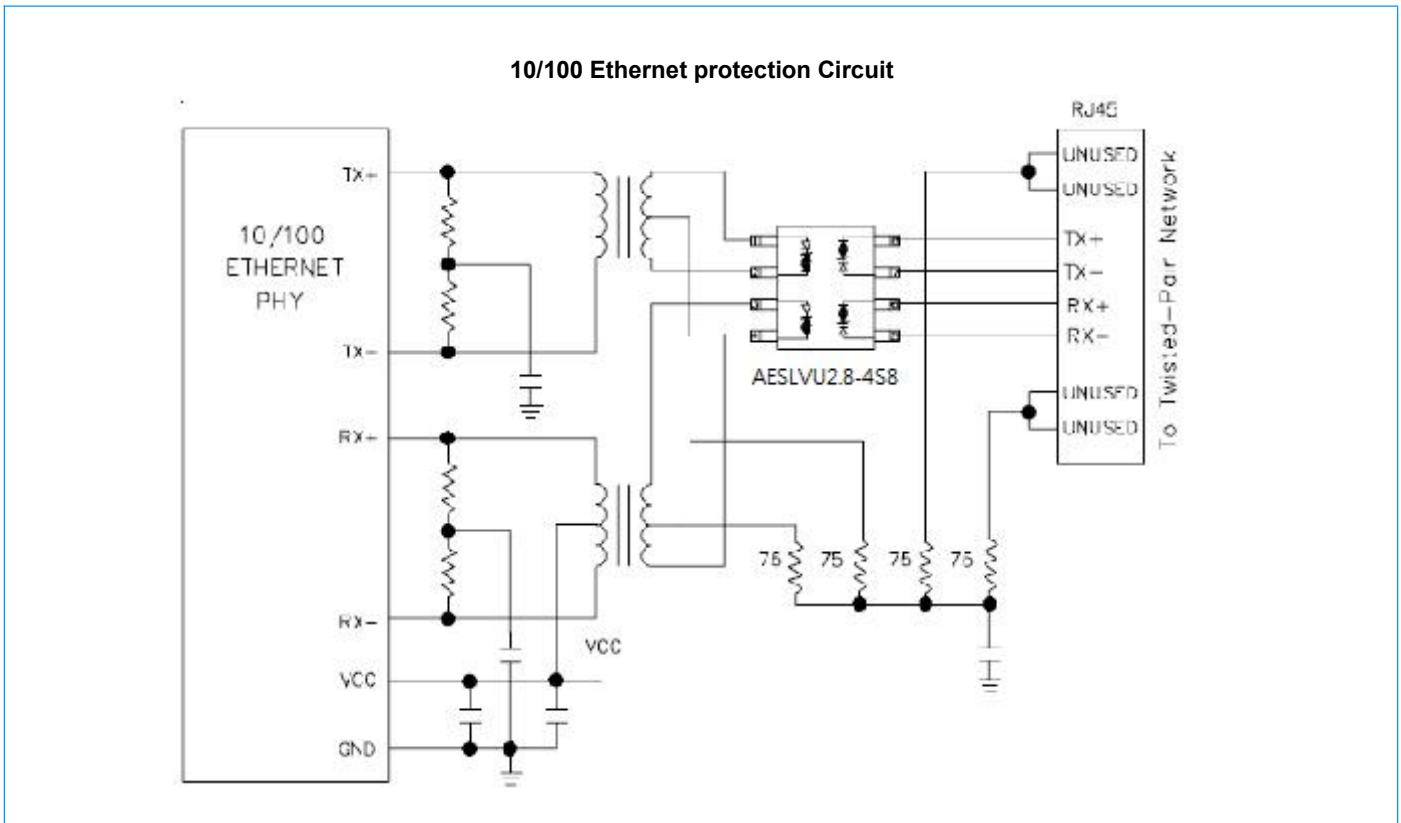
V- I Curve Characteristics


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Application



Ordering information

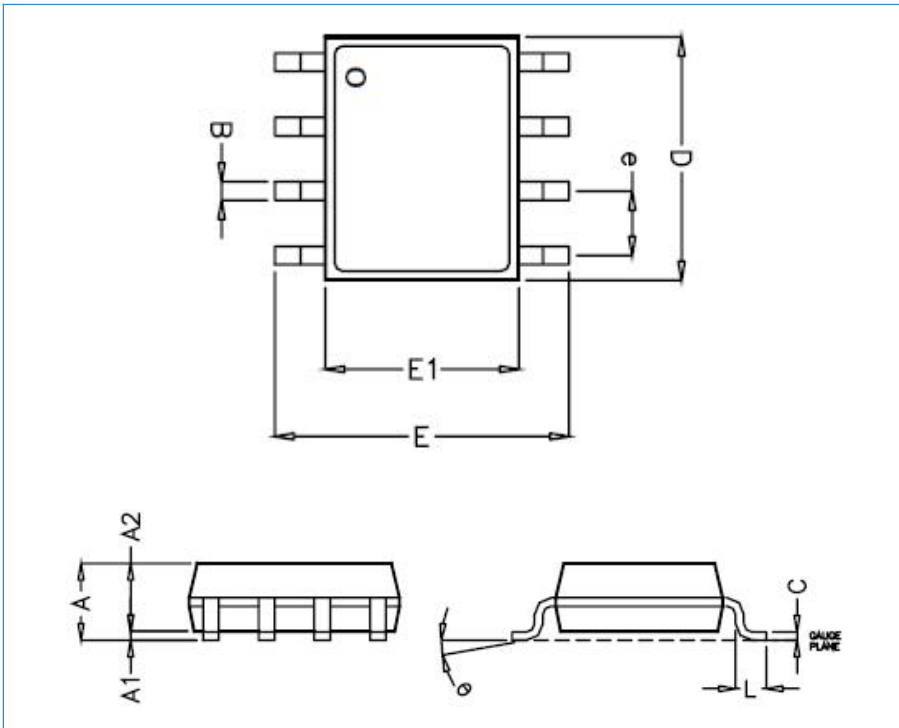
Part Number	Material	Type	Reel size	MOQ/Reel
SLVU2.8-4	Green	T/R	13 inch	2500/Reel

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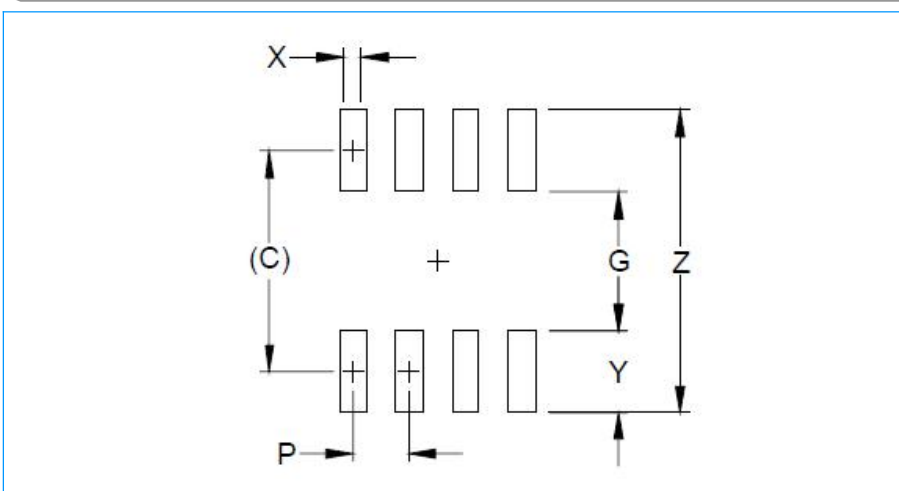
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Package Information



Symbol	Millimeters		
	Min.	Nom.	Max.
A	1.35	—	1.75
A1	0.10	—	0.25
A2	1.25	—	1.65
B	0.31	—	0.51
C	0.17	—	0.25
D	4.80	—	5.00
E	5.80	—	6.20
E1	3.80	—	4.00
e	1.27BSC		
L	0.40	—	1.27

Pad Layout



Symbol	Dimensions	
	Millimeters	Inch
C	5.20	0.205
G	3.00	0.118
P	1.27	0.050
X	0.60	0.024
Y	2.20	0.087
Z	7.40	0.291