TECH PUBLIC
台舟电子

SLVU2.8-8A1

EPD TVS Array For ESD and Latch Up Protection

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Features

- 400W peak pulse power(8/20μs)
- Protects four line pairs(eight lines)
- High peak pulse currentl
- Comprehensive pin out for easy board layout
- Low capacitance
- Low leakage current
- Low operating and clamping voltages
- Complies with following standards:
  - IEC 61000-4-2 (ESD) immunity test
    Air discharge: ±30kV
    Contact discharge: ±25kV
  - IEC61000-4-4 (EFT) 40A (5/50ns)
  - IEC61000-4-5 (Lightning) 20A (8/20μs)
- RoHS Compliant

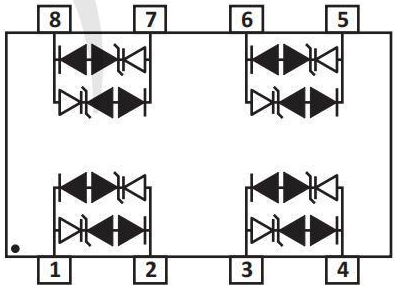
Mechanical Characteristics

- Package: SO-8
- Lead Finish: Matte Tin
- Case Material: “Green” Molding Compound.
- UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 3 per J-STD-020
- Terminal Connections: See Diagram Below
- Shipping Qty :2500pcs/7Inch Tape & Reel

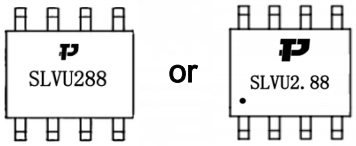
Applications

- 10/100 Ethernet
- WAN/LAN Equipment
- Switching Systems
- DSLAMs
- Desktops, Severs, &Notebooks
- Instrumentation
- Base Stations
- Analog Inputs

Dimensions and Pin Configuration



Marking:



Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

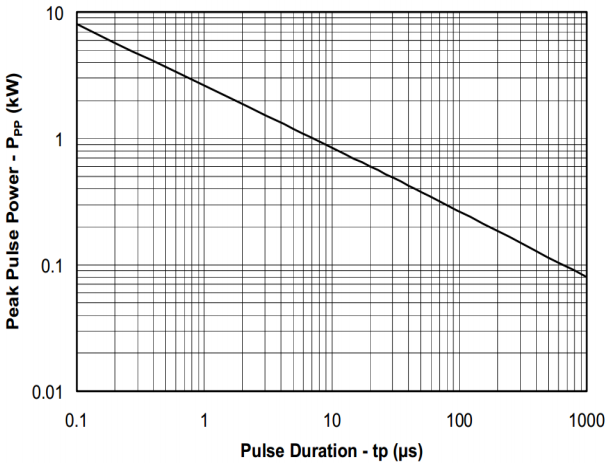
Parameter	Symbol	Value	Unit
Peak Pulse Power(8/20μs)	Ppk	400	W
Peak Pulse Current(8/20μs)	I_{PP}	20	A
ESD per IEC 61000−4−2 (Air) ESD per IEC 61000−4−2 (Contact)	V_{ESD}	±30 ±30	kV
Operating Temperature Range	T_J	−55 to +125	°C
Storage Temperature Range	Tstg	−55 to +150	°C

Electrical Characteristics (T_A=25°C unless otherwise specified)

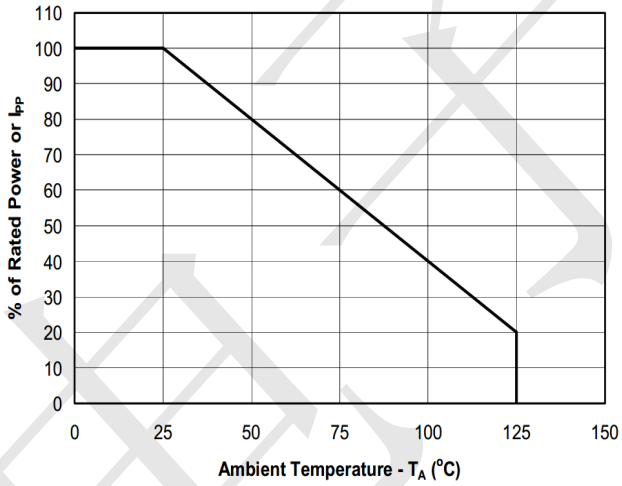
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V_{RWM}			2.8	V	
Pouch-Through Voltage	V_{PT}	3.0			V	I_{PT} = 2μA
Snap-Back Voltage	V_{SB}	2.8			V	I_{SB} = 50mA
Reverse Leakage Current	I_R		0.1	1.0	μA	V_{RWM} = 2.8V(Each Line)
Clamping Voltage	V_C			6.0	V	I_{PP} = 1A (8 x 20μs pulse) (Each Line)
Clamping Voltage	V_C			8.0	V	I_{PP} = 5A (8 x 20μs pulse) (Each Line)
Clamping Voltage	V_C			10	V	I_{PP} = 10A (8 x 20μs pulse) (Each Line)
Clamping Voltage	V_C			17	V	I_{PP} = 20A (8 x 20μs pulse) (Each Line)
Junction Capacitance	C_J		1		pF	VR = 0V, f = 1MHz(Each Line)

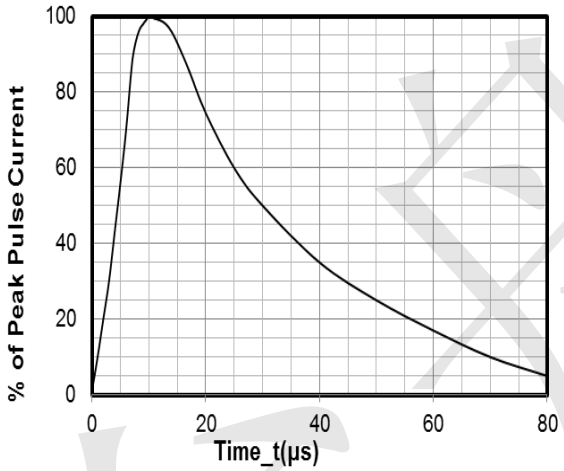
Typical Performance Characteristics (T_A=25°C unless otherwise Specified)

Non-Repetitive Peak Pulse Power vs. Pulse Time



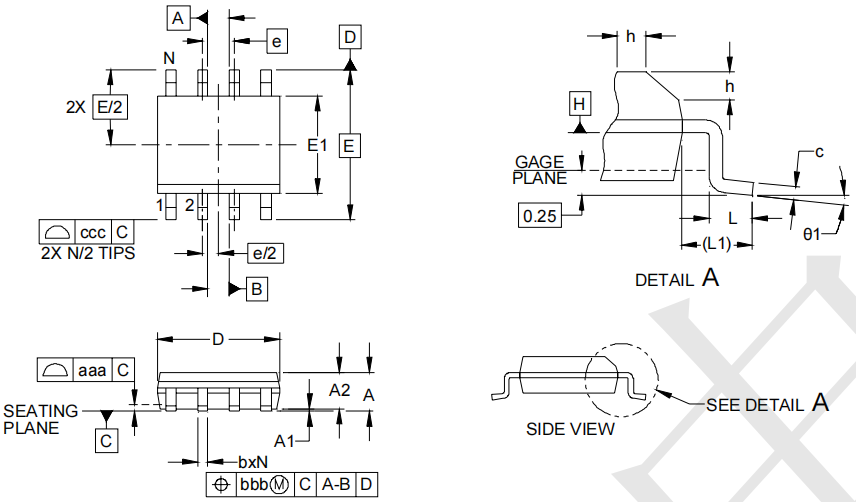
Power Derating Curve





8 X 20μs Pulse Waveform

Outline Drawing - SOP-8



DIM	DIMENSIONS					
	INCHES			MILLIMETERS		
	MIN	NOM	MAX	MIN	NOM	MAX
A	.053	-	.069	1.35	-	1.75
A1	.004	-	.010	0.10	-	0.25
A2	.049	-	.065	1.25	-	1.65
b	.012	-	.020	0.31	-	0.51
c	.007	-	.010	0.17	-	0.25
D	.189	.193	.197	4.80	4.90	5.00
E1	.150	.154	.157	3.80	3.90	4.00
E	.236 BSC			6.00 BSC		
e	.050 BSC			1.27 BSC		
h	.010	-	.020	0.25	-	0.50
L	.016	.028	.041	0.40	0.72	1.04
L1	(.041)			(1.04)		
N	8			8		
θ1	0°	-	8°	0°	-	8°
aaa	.004			0.10		
bbb	.010			0.25		
ccc	.008			0.20		

Land Pattern - SOP-8

