

Features

- ◆ 150W peak pulse power(8/20 μ s)
- ◆ One device protects one unidirectional line
- ◆ Two devices protect two high-speed line pairs
- ◆ Ultra low leakage: nA level
- ◆ Low operating voltage: 2.8V
- ◆ Low capacitance
- ◆ Ultra low clamping voltage
- ◆ Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
 - Air discharge: ± 30 kV
 - Contact discharge: ± 30 kV
 - IEC61000-4-4 (EFT) 40A (5/50ns)
 - IEC61000-4-5 (Lightning) 10A (8/20 μ s)
- ◆ RoHS Compliant

Ordering Information

Part Number	Qty per Reel	Reel Size
SLVU2.8S3	3000	7"

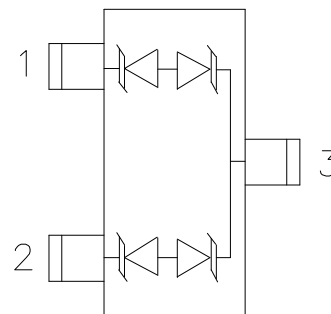
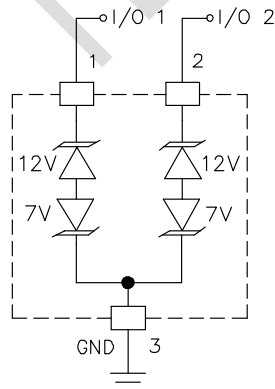
Mechanical Characteristics

- ◆ Package: SOT-23
- ◆ 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
- ◆ Marking Information: See Below

Applications

- ◆ Base Station
- ◆ Analog Inputs
- ◆ Switch Systems
- ◆ 10/100 Ethernet
- ◆ WAN/LAN Equipment

Dimensions and Pin Configuration



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

Parameter	Symbol	Value	Unit
Peak Pulse Power(8/20μs)	Ppk	150	W
Peak Pulse Current(8/20μs)	IPP	10	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	VESD	±30 ±30	kV
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Tstg	-55 to +150	°C

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

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			2.8	V	
Punch-Through Voltage	VBR	3.0			V	IT = 2μA
Reverse Leakage Current	IR		0.01	0.5	μA	VRWM = 2.8V
Clamping Voltage	VC			4	V	IPP = 1A (8 x 20μs pulse)
Clamping Voltage	VC			6	V	IPP = 5A (8 x 20μs pulse)
Clamping Voltage	VC			8	V	IPP = 10A (8 x 20μs pulse)
Junction Capacitance	CJ		5		pF	VR=0, f=1MHz

PROTECTION PRODUCTS
Typical characteristics

Fig1. 8/20 μ s Pulse Waveform

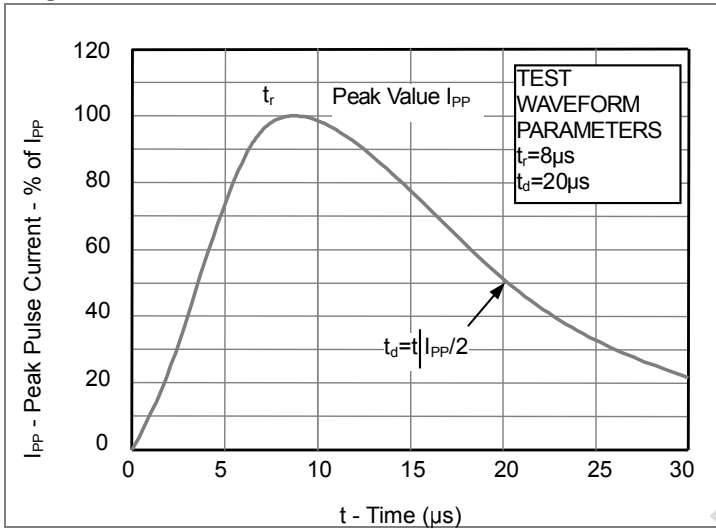


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

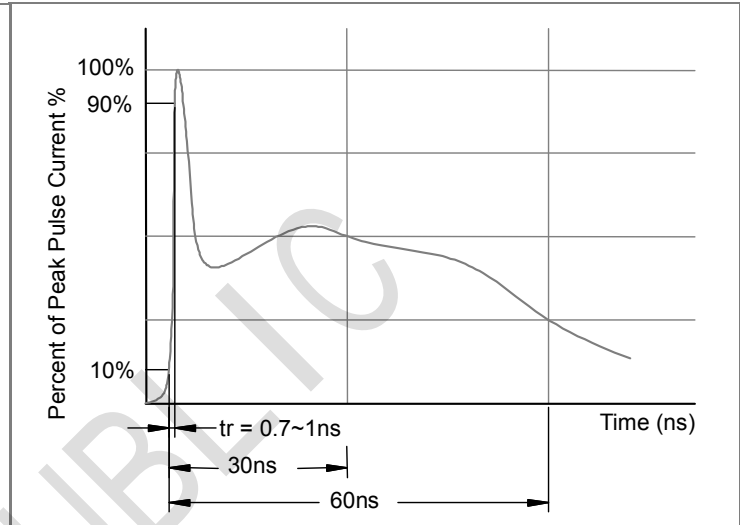
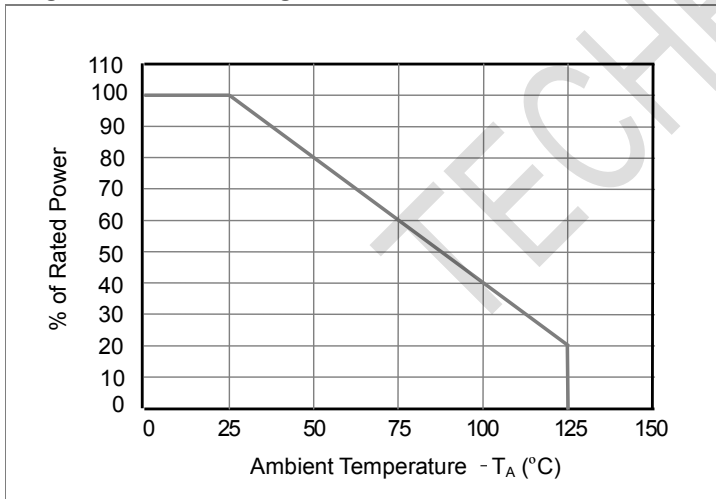
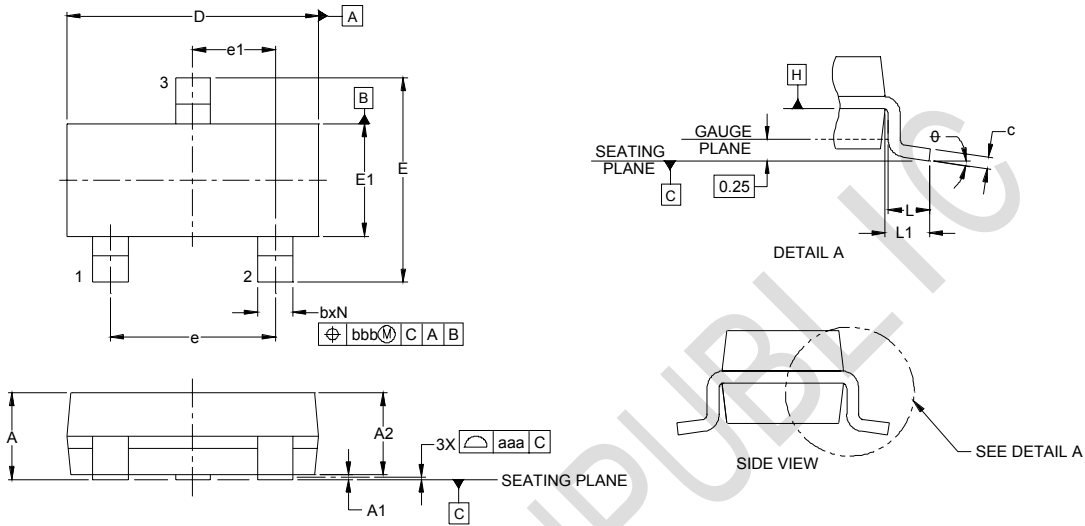


Fig3. Power Derating Curve



Outline Drawing - SOT23



DIM	INCHES			MILLIMETERS		
	MIN	NOM	MAX	MIN	NOM	MAX
A	.035	-	.044	0.89	-	1.12
A1	.000	-	.004	0.01	-	0.10
A2	.035	.037	.040	0.88	0.95	1.02
b	.012	-	.020	0.30	-	0.51
c	.003	-	.007	0.08	-	0.18
D	.110	.114	.120	2.80	2.90	3.04
E	.082	.093	.104	2.10	2.37	2.64
E1	.047	.051	.055	1.20	1.30	1.40
e	.075		1.90 BSC			
e1	.037		0.95 BSC			
L	.015	.020	.024	0.40	0.50	0.60
L1	.022		(0.55)			
N	3		3			
θ	0°	-	8°	0°	-	8°
aaa	.004		0.10			
bbb	.008		0.20			

Land Pattern - SOT23

