

Features

- ◆ 400W peak pulse power(8/20μs)
- ◆ Protects four line pairs(eight lines)
- ◆ High peak pulse current
- ◆ 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: ±30kV
 - IEC61000-4-4 (EFT) 40A (5/50ns)
 - IEC61000-4-5 (Lightning) 20A (8/20μs)
- ◆ RoHS Compliant

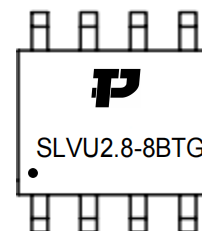
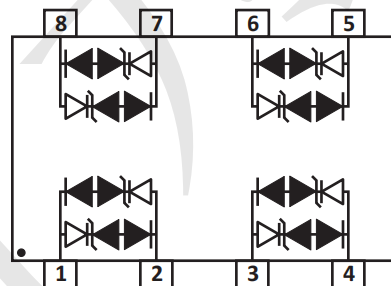
Mechanical Characteristics

- ◆ 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, Servers, &Notebooks
- ◆ Instrumentation
- ◆ Base Stations
- ◆ Analog Inputs

Dimensions and Pin Configuration



Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power(8/20 μs)	Ppk	400	W
Peak Pulse Current(8/20 μs)	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	$^{\circ}\text{C}$
Storage Temperature Range	T _{stg}	-55 to +150	$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ 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} = 2 μA
Snap-Back Voltage	V _{SB}	2.8			V	I _{SB} = 50mA
Reverse Leakage Current	I _R			1.0	μA	V _{RWM} = 2.8V(Each Line)
Clamping Voltage	V _C			8.0	V	I _{PP} = 5A (8 x 20 μs pulse) (Each Line)
Clamping Voltage	V _C			14	V	I _{PP} = 8 A (8 x 20 μs pulse) (Each Line)
Clamping Voltage	V _C			17	V	I _{PP} = 20A (8 x 20 μs pulse) (Each Line)
Junction Capacitance	C _J		1		pF	V _R = 0V, f = 1MHz(Each Line)

Typical Performance Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise Specified)

Fig1. 8/20 μs Pulse Waveform

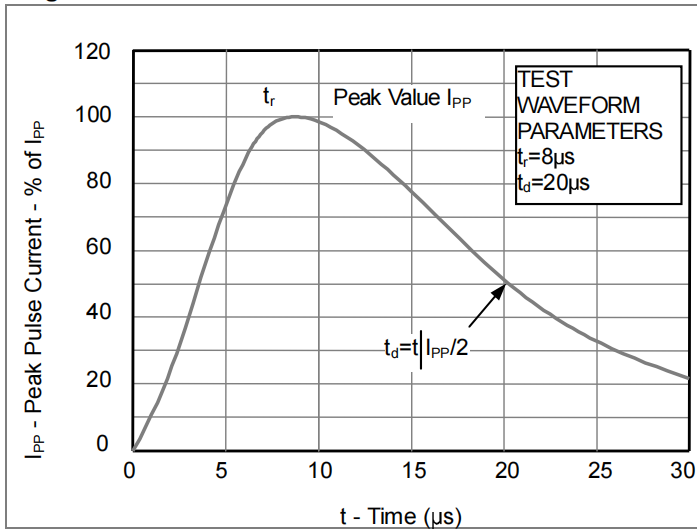


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

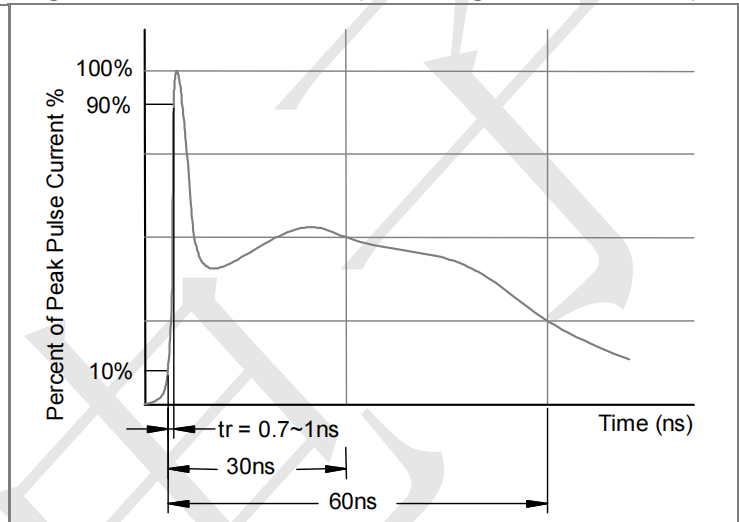
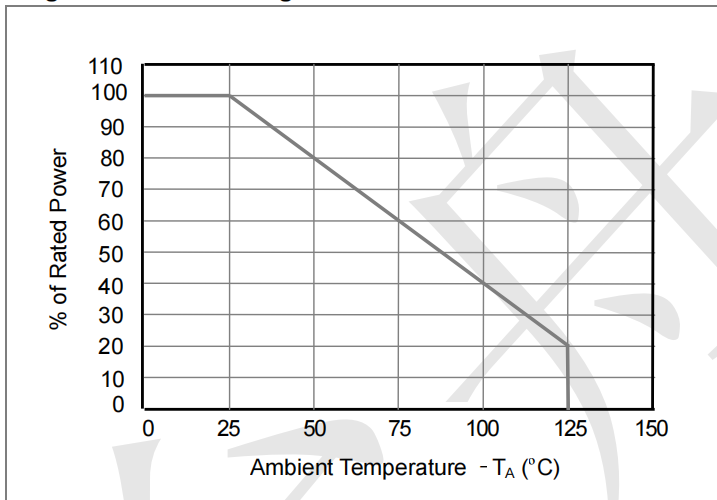
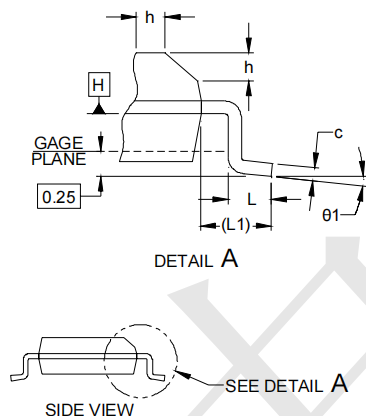


Fig3. Power Derating Curve





DIM	INCHES			MILLIMETERS		
	MIN	NOM	MAX	MIN	NOM	MAX
A	.053	-	.069	1.35	-	1.73
A1	.004	-	.010	0.10	-	0.25
A2	.049	-	.065	1.25	-	1.63
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	.040	0.40	0.72	1.04
L1	(.041)			(1.04)		
N	8			8		
Ø1	0°	-	8°	0°	-	8°
aaa	.004			0.10		
bbb	.010			0.25		
ccc	.008			0.20		

Land Pattern - SOP-8

