

MSKSEMI

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

Product data sheet

Features

- 400W peak pulse power (8/20µs)
- Protects two line pairs (four lines)
- Ultra low leakage: nA level
- Low operating voltage: 2.8V
- Very low capacitance: 2pF
- Ultra low clamping voltage
- JEDEC SO-8 package
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
Air discharge: ±30kV
Contact discharge: ±30kV
 - IEC61000-4-5 (Lightning) 30A (8/20µs)
- RoHS Compliant

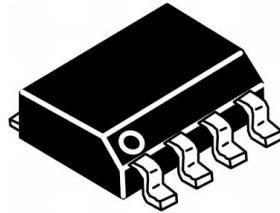
Mechanical Characteristics

- Lead Finish: Matte Tin
- Moisture Sensitivity: Level 3 per J-STD-020
- Terminal Connections: See Diagram Below
- Marking Information: See Below

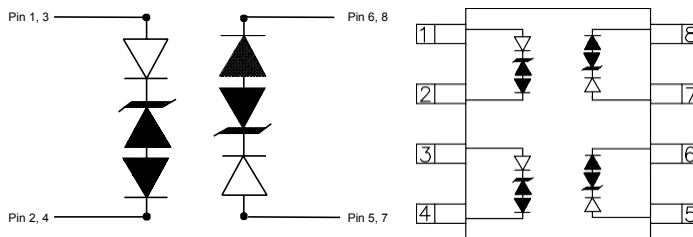
Applications

- Base Station
- Analog Inputs
- Switch Systems
- 10/100/1000 Ethernet
- WAN/LAN Equipment
- Desktops, Servers, and Notebooks
- Low Voltage Interfaces

Marking Information



Dimensions and Pin Configuration



Circuit and Pin Schematic

SOP-8

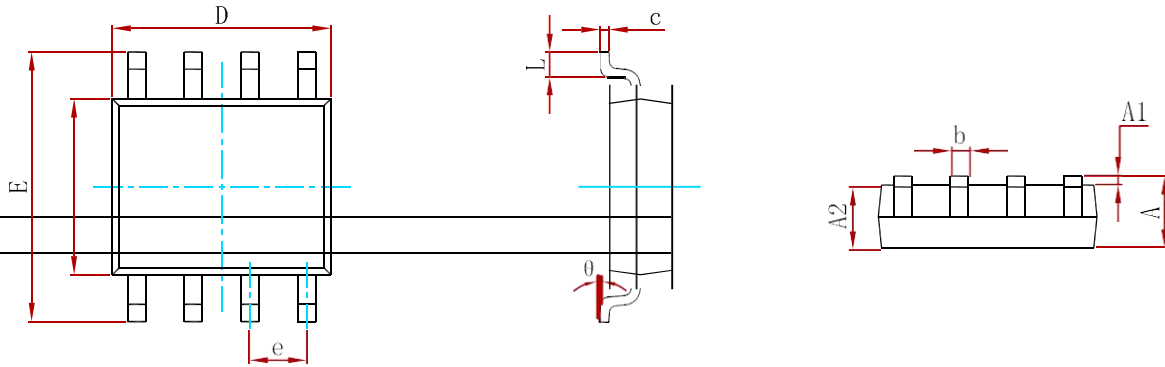
Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

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)	V _{ESD}	±30	kV
ESD per IEC 61000-4-2 (Contact)		±30	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

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

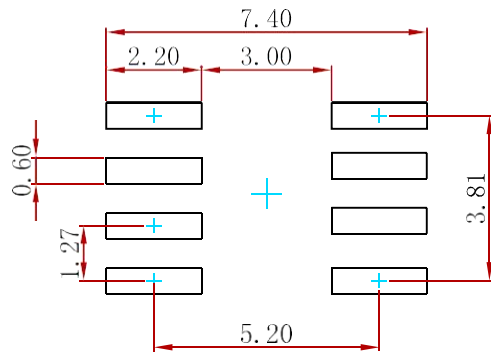
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V _{RWM}			2.8	V	
Breakdown Voltage	V _{BR}	3.0			V	I _T = 2μA
	V _{SB}	3.0			V	I _{SB} = 50mA
Reverse Leakage Current	I _R		0.001	1	μA	V _{RWM} = 2.8V
Clamping Voltage	V _C			8.5	V	I _{PP} = 5A (8 x 20μs pulse)
Clamping Voltage	V _C			18	V	I _{PP} = 20A (8 x 20μs pulse)
Junction Capacitance	C _J		2	3	pF	V _R = 0V, f = 1MHz

PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.350	1.750	0.053	0.069
A1	0.100	0.250	0.004	0.010
A2	1.350	1.550	0.053	0.061
b	0.330	0.510	0.013	0.020
c	0.170	0.250	0.007	0.010
D	4.800	5.000	0.189	0.197
e	1.270 (BSC)		0.050 (BSC)	
E	5.800	6.200	0.228	0.244
E1	3.800	4.000	0.150	0.157
L	0.400	1.270	0.016	0.050
θ	0°	8°	0°	8°

Suggested Pad Layout



Note:
 1. Controlling dimension: in millimeters.
 2. General tolerance: ± 0.05mm.
 3. The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
MSKSLVU2.8-4	SOP-8	2500

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