MSKSEMI















ESD

TVS

TSS

MOV

GDT

PLED

Broduct data sheet





SLP2510P8

Features

- 60Watts peak pulse power (tp = 8/20µs)
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Low capacitance (Cj=0.2pF typ. I/O to I/O)
- IEC 61000-4-2 ±20kV contact ±25kV air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 4A (8/20μs)

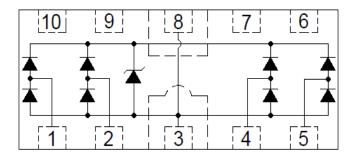
Mechanical Data

- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

Applications

- USB3.0, USB2.0, Ethernet
- HDMI 2.0, Displayport 1.3,eSATA
- Unified Display interface
- Digital Visual Interface
- High speed serial interface

Schematic & PIN Configuration



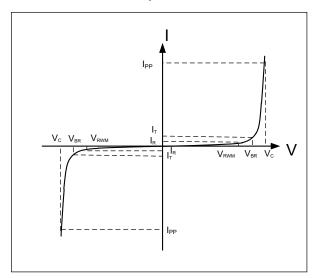


Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				5.0	V
Reverse Breakdown Voltage	V_{BR}	I _T =1mA	6.0			V
Reverse Leakage Current	I _R	V _{RWM} =5V,T=25℃			1	μΑ
Peak Pulse Current	I _{PP}	tp =8/20μs			4	А
Clamping Voltage	V _C	I _{PP} =4A,t _p =8/20μs			15	V
Junction Capacitance	C _j	V _R = 0V, f = 1MHz I/O to I/O		0.2	0.3	pF
Junction Capacitance		V _R = 0V, f = 1MHz I/O to GND		0.4	0.55	рΓ

Electrical Parameters (TA = 25°C unless otherwise noted)

	Parameter		
I PP	MaximumReversePeak Pulse Current		
Vc	Clamping Voltage @ IPP		
VRWM	WorkingPeak Reverse Voltage		
lR	Maximum Reverse Leakage Current @ VRWM		
V _{BR}	Breakdown Voltage @ I⊤		
lτ	Test Current		



Note:.8/20 μ s pulse waveform.



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Typical Characteristic Curves

Fig.1 Peak Pulse Power Rating Curve

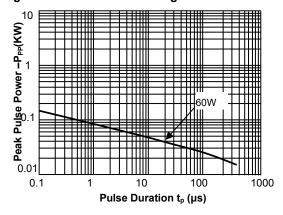


Fig.2 Pulse Derating Curve

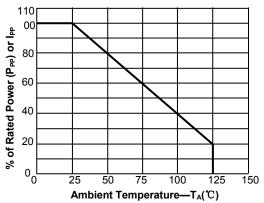


Fig.3 Pulse Waveform-8/20µs

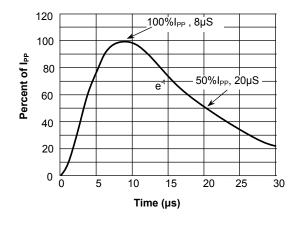
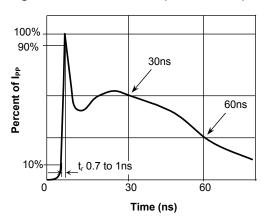


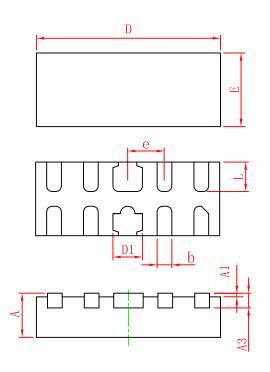
Fig.4 Pulse Waveform-ESD(IEC61000-4-2)



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Compiance

PACKAGE MECHANICAL DATA



Symbol	Dimensions in millimeters					
Symbol	Min	Nom	Max			
Α	0.45	0.50	0.55			
A1	-	0.02	0.05			
A3	0.10	0.15	0.20			
D	2.45	2.50	2.55			
E	0.95	1.00	1.05			
D1	0.35	0.40	0.45			
b	0.15	0.20	0.25			
е	0.50BSC					
L	0.35	0.40	0.45			

REEL SPECIFICATION

P/N	PKG	QTY
RClamp0524P.TCT-MS	SLP2510P8	3000



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