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SEMICONDUCTOR

ESD TVS TSS MOV GDT PLED

Product data sheet

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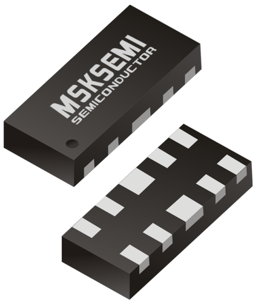


DFN2510-10

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)

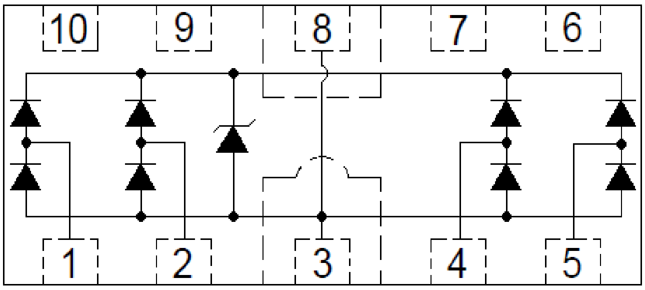
Mechanical Data

- 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

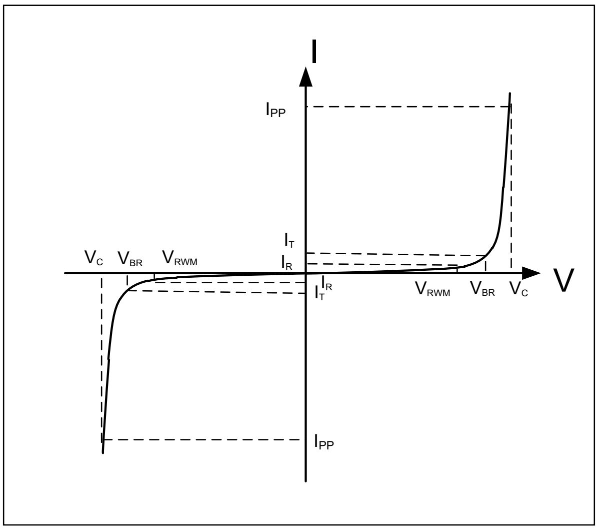


Electrical Characteristics

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	µA
Peak Pulse Current	I_{PP}	tp =8/20µs			4	A
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
		V_R = 0V, f = 1MHz I/O to GND		0.4	0.55	

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

	Parameter
I_{PP}	MaximumReversePeak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	WorkingPeak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current



Note:.8/20µs pulse waveform.

Typical Characteristic Curves

Fig.1 Peak Pulse Power Rating Curve

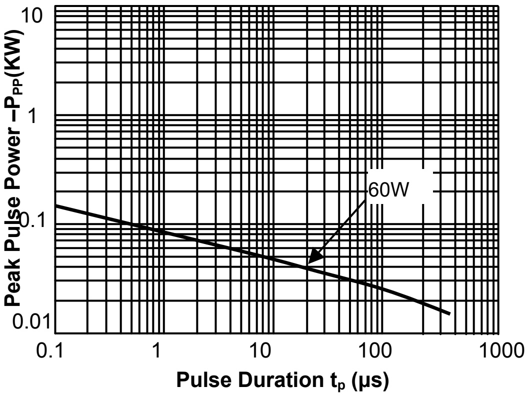


Fig.2 Pulse Derating Curve

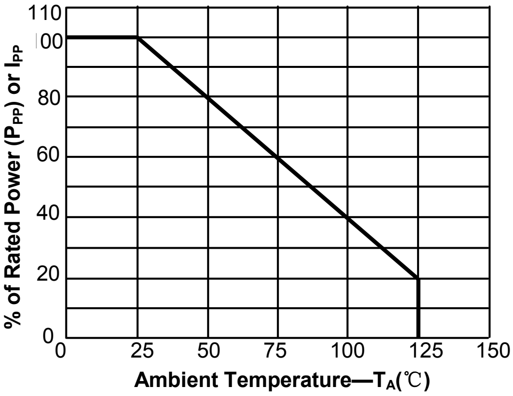


Fig.3 Pulse Waveform-8/20μs

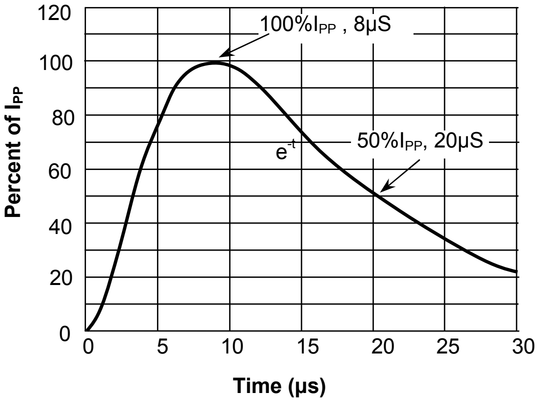
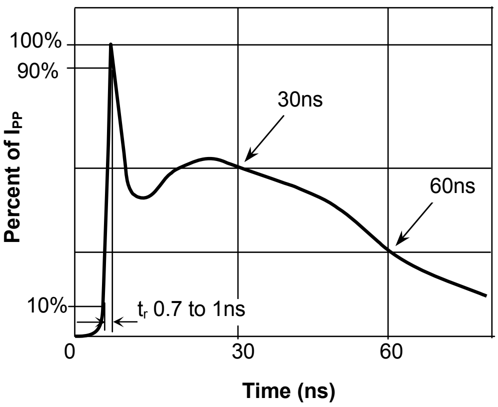
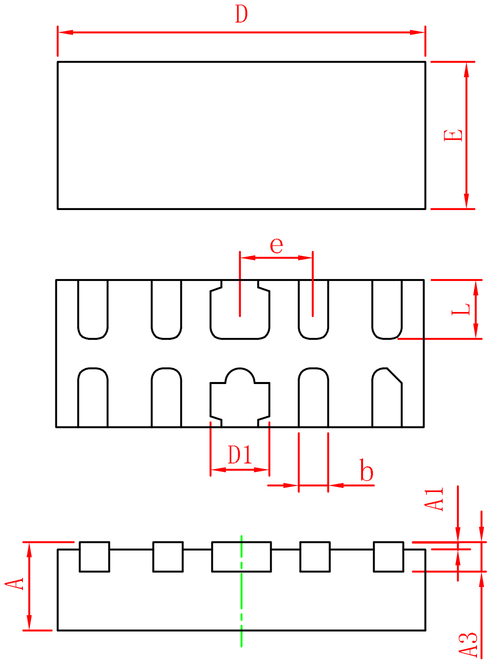


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)



PACKAGE MECHANICAL DATA



Symbol	Dimensions in millimeters		
	Min	**Nom**	**Max**
A	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
e	0.50BSC		
L	0.35	0.40	0.45

REEL SPECIFICATION

P/N	PKG	QTY
MSULC0524P	DFN2510P10	3000

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