

MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

RCLAMP0524J-MS

Product specification

Features

- 70Watts peak pulse power ($t_p = 8/20\mu s$)
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Low capacitance ($C_j = 0.2pF$ typ. I/O to I/O)
- IEC 61000-4-2 $\pm 20kV$ contact $\pm 25kV$ air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 4.5A (8/20 μs)

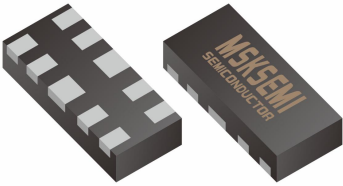

Mechanical Data

- Tiny DFN2710(2.7mmx1.0mm) package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

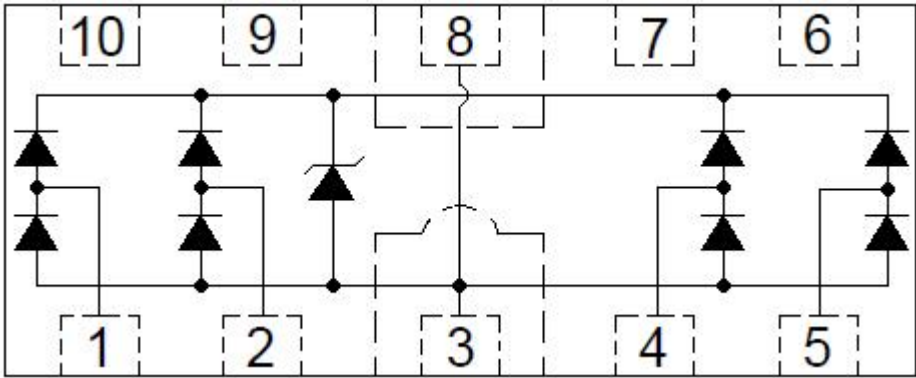
Applications

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

Reference News

SLP2710P8	Marking
	

Schematic & PIN Configuration



Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	70	Watts
Peak Pulse Current ($t_p = 8/20\mu s$) (note1)	I_{PP}	4.5	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	25 20	kV
Lead Soldering Temperature	T_L	260(10seconds)	°C
Junction Temperature	T_J	-55 to + 125	°C
Storage Temperature	T_{stg}	-55 to + 125	°C

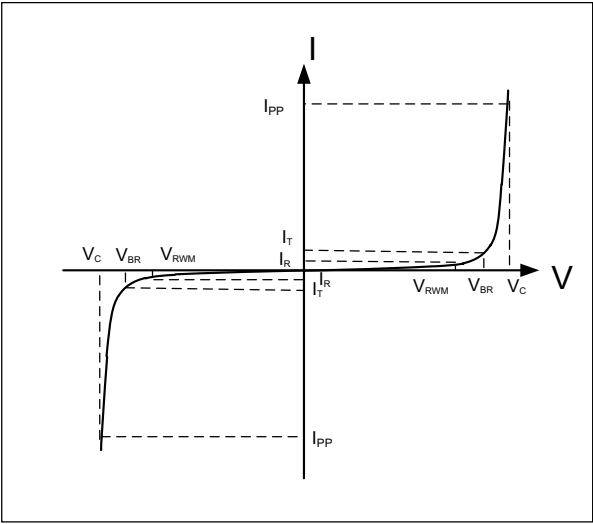
Electrical Characteristics

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	$V_{RWM} = 5V, T = 25^\circ C$			1	μA
Peak Pulse Current	I_{PP}	$t_p = 8/20\mu s$			4.5	A
Clamping Voltage	V_C	$I_{PP} = 4A, t_p = 8/20\mu s$			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

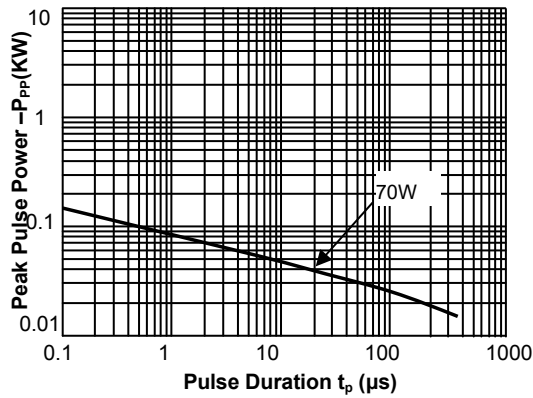


Fig.2 Pulse Derating Curve

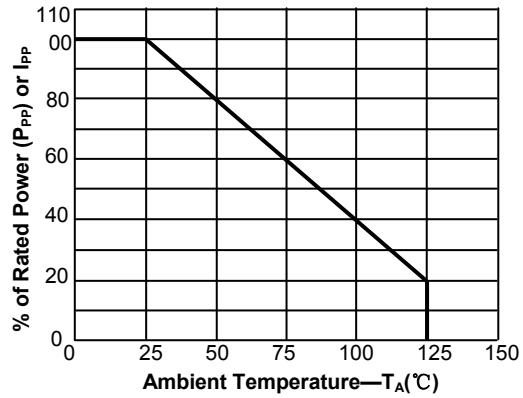


Fig.3 Pulse Waveform-8/20 μ s

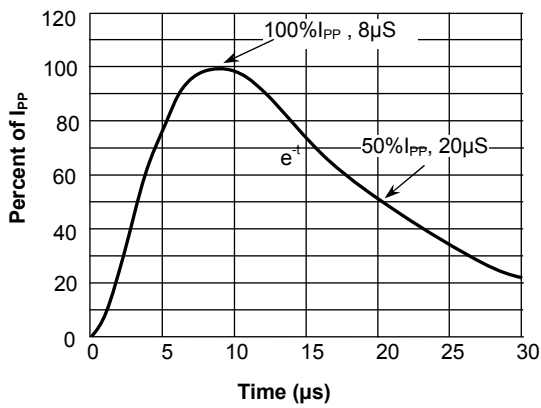
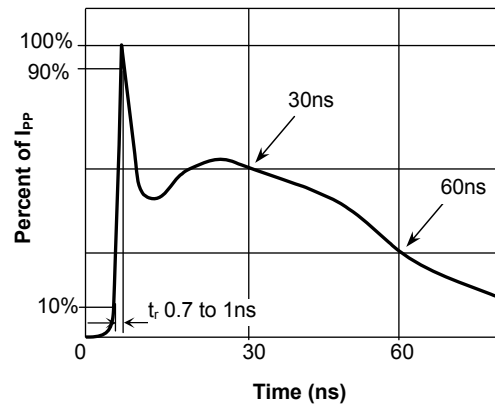
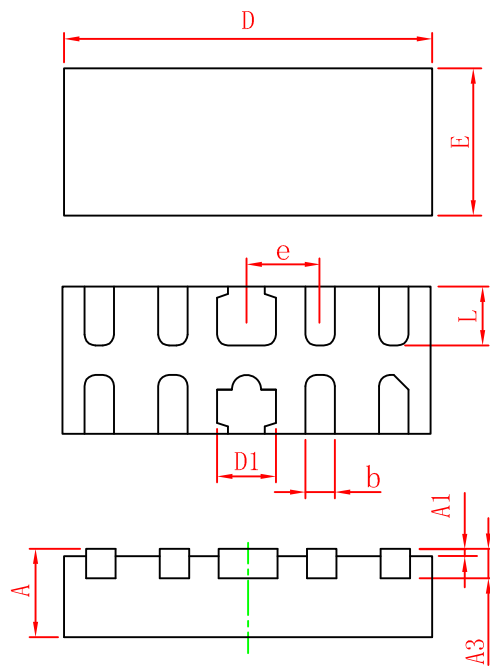


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)



OutlineDrawing– SLP2710P8



Symbol	Dimensions in millimeters		
	Min	Nom	Max
A	0.38	0.50	0.58
A1	-	0.02	0.05
A3	0.10	0.13	0.20
D	2.60	2.70	2.80
E	0.90	1.00	1.10
D1	0.35	0.40	0.45
b	0.15	0.20	0.25
e	0.60BSC		
L	0.30	0.38	0.45

Order information

Orderable Device	Package	Packing Option
RCLAMP0524J-MS	SLP2710P8	3000PCS

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