# MSKSEMI 美森科













**ESD** 

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TSS

MOV

GDT

PIFD

## RCLAMP7534P-MS

**Product specification** 





#### **Features**

- 150Watts peak pulse power (tp = 8/20μs)
- Transient protection for high speed data lines to IEC 61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
   IEC 61000-4-4 (EFT) 40A (5/50ns)
- Working voltages : 5V
- Protects fiveI/O lines
- Low operating and clamping voltages
- Solid-state silicon avalanche technology

#### **Applications**

- Notebooks, Desktops, Servers and Video Graphics Cards
- USB Power & Data Line Protection
- Monitors and Flat Panel Displays
- I<sup>2</sup>C Bus Protection
- Portable Instrumentation
- Set Top Box

#### **Reference News**

Outline	Circuit Diagram	Marking	
	1 3 4 5	.M534	
DFN2010-5L	2		

### Maximum Rating @ Ta=25°Cunless otherwise specified

Symbol	Parameter	Ratings	Units
Ррк	Peak Pulse Power (tp = 8/20μs)	150	Watts
TL	Lead Soldering Temperature	260(10sec.)	$^{\circ}\!$
TJ	Operating Temperature	-55 to +125	$^{\circ}\!$
Тѕтс	Storage Temperature	-55 to +150	$^{\circ}$

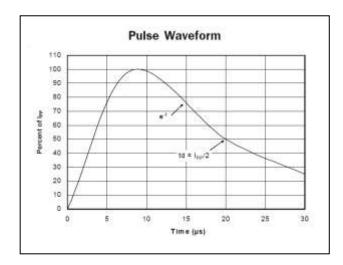


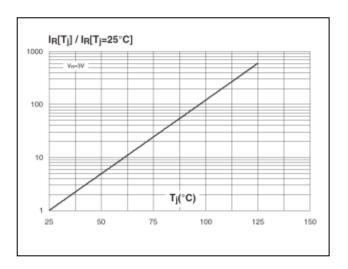
## ElectricalCharacteristics@ Ta=25℃unless otherwise

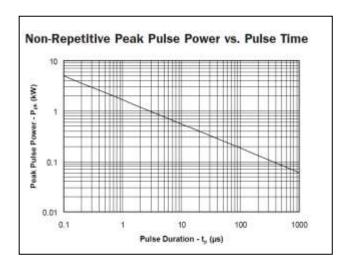
Symbol	Parameter	Conditions	Min.	Тур.	Max.	Units
VRWM	Reverse Working Voltage	Any I/O to Ground			5.0	V
V <sub>BR</sub>	Reverse Breakdown Voltage	ਮਿ = 1mA, Any I/O to Ground	6.0			V
<b>I</b> R	Reverse Leakage Current	V <sub>RWM</sub> = 5V, Any I/O to Ground			1	μA
Vc	Clamping Voltage	I <sub>PP</sub> = 1A, tp =8/20µs, any I/O pin to Ground			9.8	V
VC	Ciamping Voltage	I <sub>PP</sub> = 3.5A, tp =8/20μs, any I/O pin to Ground			15	V
C	Junction Capacitance	V <sub>R</sub> = 0V, f = 1MHz, between I/O pins		0.3	0.5	pF
		V <sub>R</sub> = 0V, f = 1MHz, any I/O pin to Ground		0.5	0.8	pF

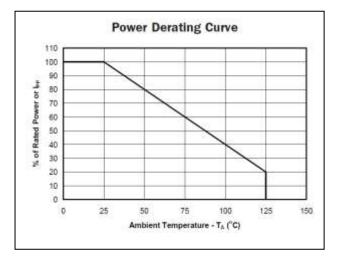


### Typical Characteristics@ Ta=25°C unless otherwise specified





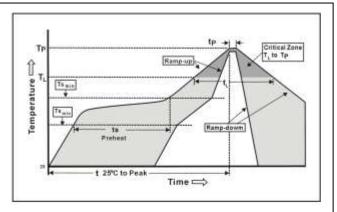






### **Soldering Parameters**

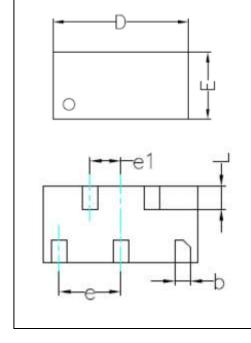
Reflow Condition		Fb – Free assembly	
Pre Heat	-Temperature Min (T <sub>scMm</sub> )	150°C	
	-Temperature Max (T <sub>s(Max)</sub> )	200°C	
	-Time (Min to max) (t <sub>j</sub> )	60 - 180 secs	
Average ( (T <sub>L</sub> ) to pe	ramp up rate (Liquidus) Temp ak	3°C/second Max	
T <sub>s (Max)</sub> to T <sub>L</sub> - Ramp-up Rate		3°C/second Max	
Reflow	-Temperature (T <sub>i</sub> ) (Liquidus)	217°C	
	-Temperature (t <sub>i</sub> )	60 - 150 seconds	
Peak Temperature (T <sub>p</sub> )		250°°-5°°C	
Time within 5°C of actual peak Temperature (t <sub>p</sub> )		20 - 40 seconds	
Ramp-down Rate		6°C/second Max	
Time 25°C to peak Temperature (Tp)		8 minutes Max.	
Do not exceed		260°C	

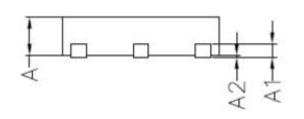


## Package Outline

Plastic surface mounted package

DFN2010-5L

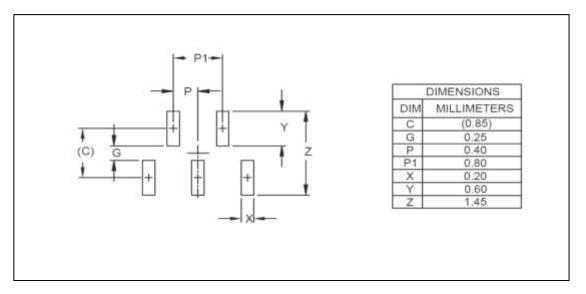




	Packa	ge Dimension	
	Min	Nom	Max
D	1.55	2.00	1.65
E	0.95	1.00	1.05
L	0.25	0.30	0.35
b	0.15	0.20	0.25
e1	0.40BSC		
е	0.80BSC		
Α	0.45	0.50	0.55
A1	0.15REF		
A2	0.00	0.02	0.05



## **Soldering Footprint**



#### **REEL SPECIFICATION**

P/N	PKG	QTY
RCLAMP7534P-MS	DFN2010-5L	3000



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