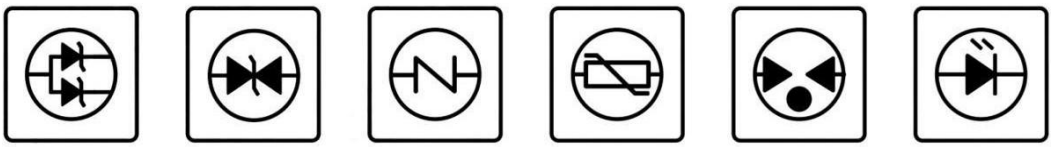
MSKSEMI 美森科
SEMICONDUCTOR



RCLAMP7534P-MS

Product specification

RCLAMP7534P-MS

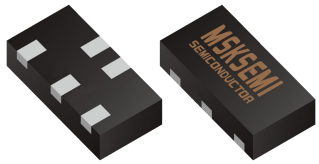
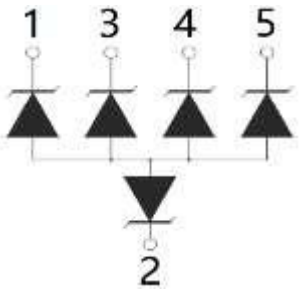
Features

- 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 fivel/O lines
- Low operatingand 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
- I²C Bus Protection
- Portable Instrumentation
- Set Top Box

Reference News

Outline	Circuit Diagram	Marking
		
DFN2010-5L		

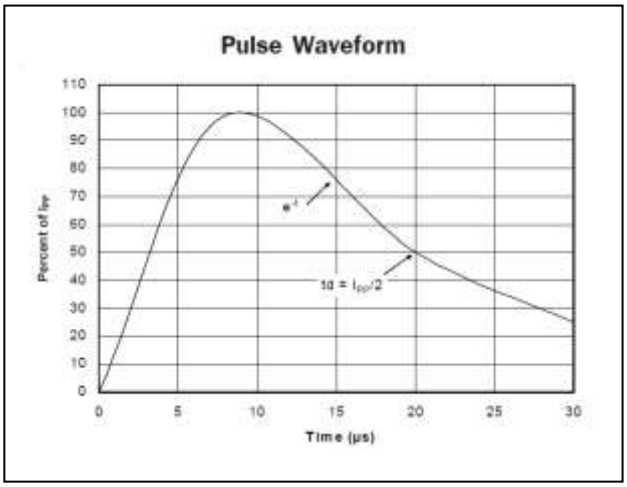
Maximum Rating @ Ta=25℃unless otherwise specified

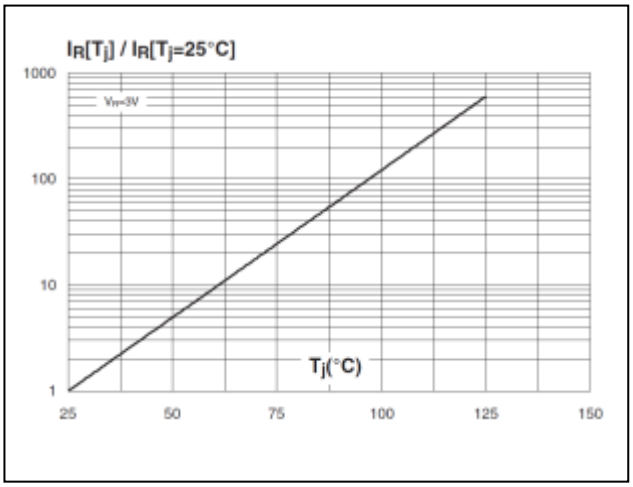
Symbol	Parameter	Ratings	Units
P_{PK}	Peak Pulse Power (tp = 8/20μs)	150	Watts
T_L	Lead Soldering Temperature	260(10sec.)	℃
T_J	Operating Temperature	-55 to +125	℃
T_{STG}	Storage Temperature	-55 to +150	℃

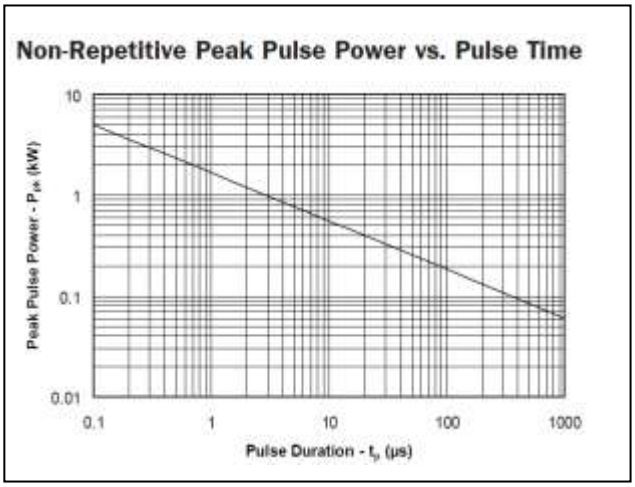
ElectricalCharacteristics@ Ta=25℃unless otherwise

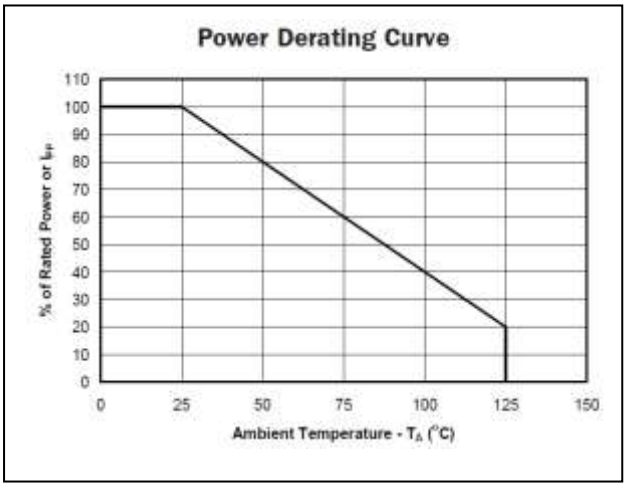
Symbol	Parameter	Conditions	Min.	Typ.	Max.	Units
V_{RWM}	Reverse Working Voltage	Any I/O to Ground			5.0	V
V_{BR}	Reverse Breakdown Voltage	I_T = 1mA, Any I/O to Ground	6.0			V
I_R	Reverse Leakage Current	V_{RWM} = 5V, Any I/O to Ground			1	μA
V_C	Clamping Voltage	I_{PP} = 1A, tp =8/20μs, any I/O pin to Ground			9.8	V
		I_{PP} = 3.5A, tp =8/20μs, any I/O pin to Ground			15	V
C_J	Junction Capacitance	V_R = 0V, f = 1MHz, between I/O pins		0.3	0.5	pF
		V_R = 0V, f = 1MHz, any I/O pin to Ground		0.5	0.8	pF

Typical Characteristics@ Ta=25℃ unless otherwise specified



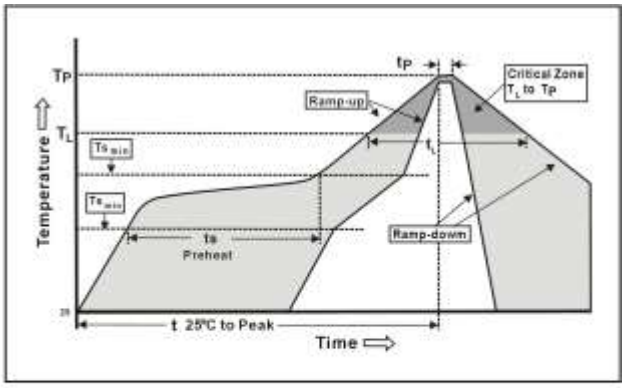






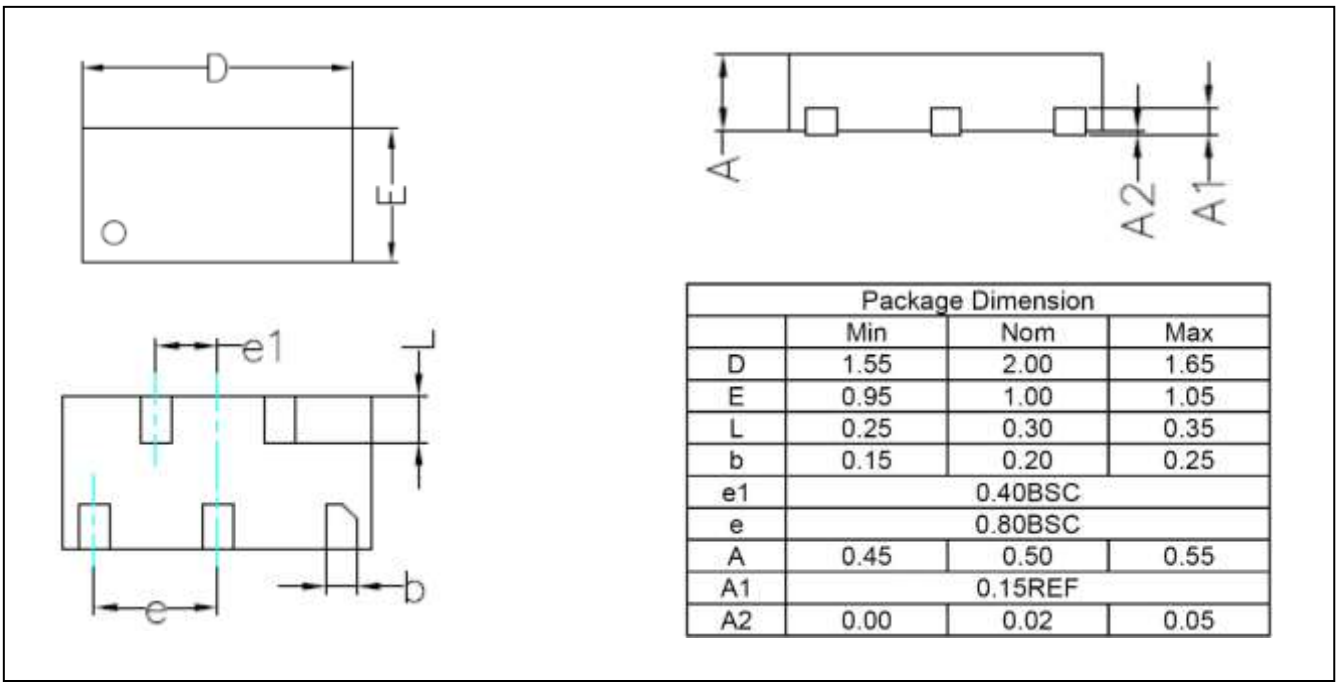
Soldering Parameters

Reflow Condition		Fb – Free assembly
Pre Heat	-Temperature Min ($T_{s(Min)}$)	150°C
	-Temperature Max ($T_{s(Max)}$)	200°C
	-Time (Min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus) Temp (T_L) to peak		3°C/second Max
$T_{S(Max)}$ to T_L - Ramp-up Rate		3°C/second Max
Reflow	-Temperature (T_L) (Liquidus)	217°C
	-Temperature (t_L)	60 – 150 seconds
Peak Temperature (T_P)		250$^{+0/-5}$ °C
Time within 5°C of actual peak Temperature (t_P)		20 – 40 seconds
Ramp-dowm Rate		6°C/second Max
Time 25°C to peak Temperature (T_P)		8 minutes Max.
Do not exceed		260°C



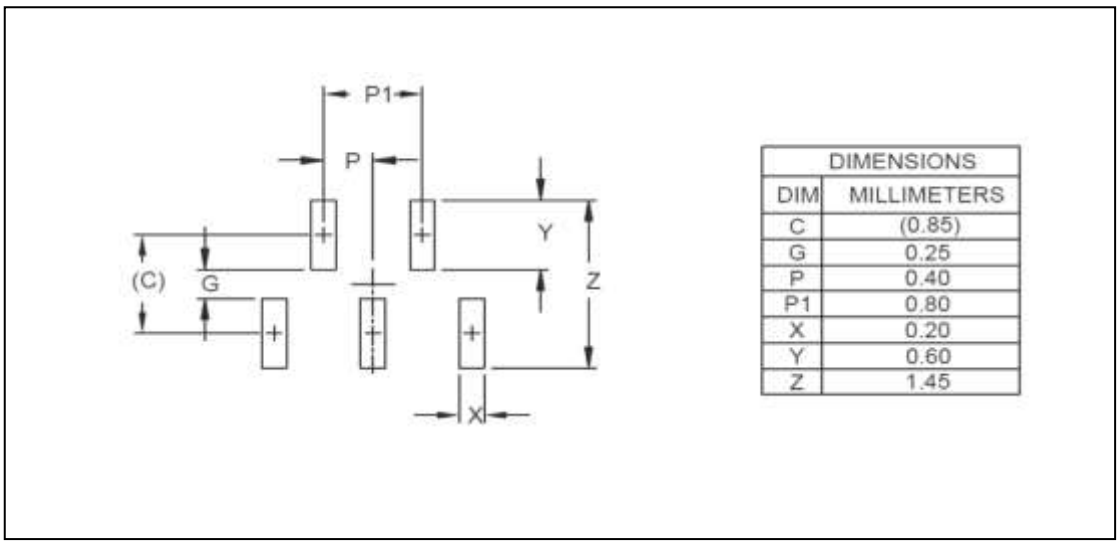
Package Outline

Plastic surface mounted package DFN2010-5L



Package 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	
e		0.80BSC	
A	0.45	0.50	0.55
A1		0.15REF	
A2	0.00	0.02	0.05

Soldering Footprint



DIMENSIONS	
DIM	MILLIMETERS
C	(0.85)
G	0.25
P	0.40
P1	0.80
X	0.20
Y	0.60
Z	1.45

REEL SPECIFICATION

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

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