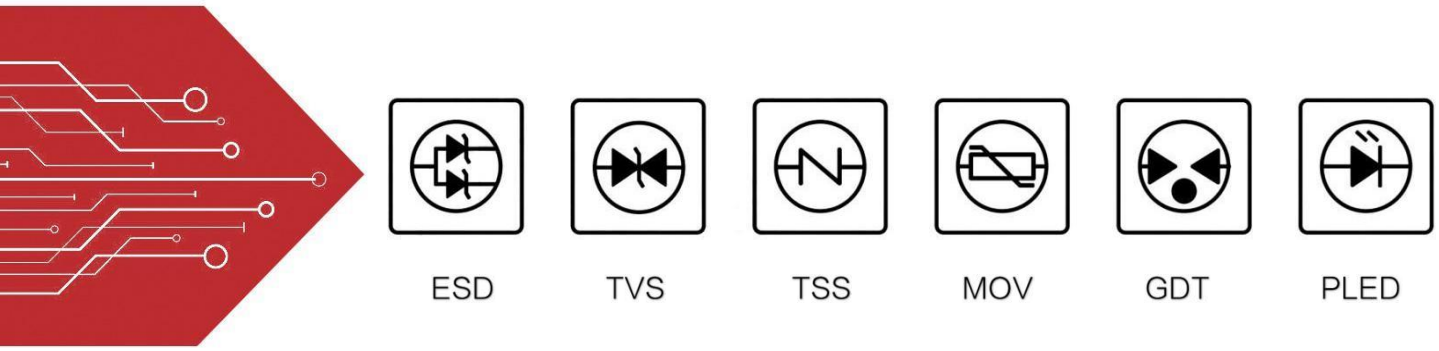
MSKSEMI
SEMICONDUCTOR



Product data sheet

Features

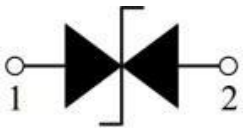
Ultra Low Capacitance: 0.30pF(typ.)
Reverse Working Voltage: 5V
IEC 61000-4-2 (ESD Air): ±20kV
IEC 61000-4-2 (ESD Contact): ±20kV
IEC 61000-4-5 (Lightning 8/20μs): 5A

Pin Description

Applications

Smart Phone and Tablet PC
TV and Set Top Box
Wearable Devices
PDA

Schematic Diagram



Limiting Values(T_A = 25 °C, unless otherwise specified)

Symbol	Parameter	Conditions	Min	Max	Unit
V_{ESD}	Electrostatic Discharge Voltage	IEC 61000-4-2; Contact Discharge	-	±20	kV
		IEC 61000-4-2; Air Discharge	-	±20	kV
P_{PP}	Peak Pulse Power	t_P = 8/20 μs	-	110	W
I_{PPM}	Rated Peak Pulse Current	t_P = 8/20 μs	-	5.0	A
T_A	Operating Temperature Range	-	-55	125	℃
T_{stg}	Storage Temperature Range	-	-55	150	℃

Electrical Characteristics(T_A = 25 °C unless otherwise specified)

Symbol	Parameter	Conditions	Min	Typ.	Max	Unit
V_{RWM}	Reverse Working Voltage	T_A = 25 °C	-	-	5.0	V
V_{BR}	Breakdown Voltage	I_R = 1mA; T_A = 25 °C	6.0	8.5	9.5	V
I_R	Reverse Leakage Current	V_{RWM} = 5V; T_A = 25 °C	-	-	0.1	μA
V_C	Clamping Voltage	I_{PP}=1A, t_P=8/20μs	-	-	10	V
		I_{PP}=5.0A, t_P=8/20μs	-	-	22	V
C_J	Junction Capacitance	V_R = 0V, f = 1 MHz	-	0.30	0.40	pF

Typical Characteristics

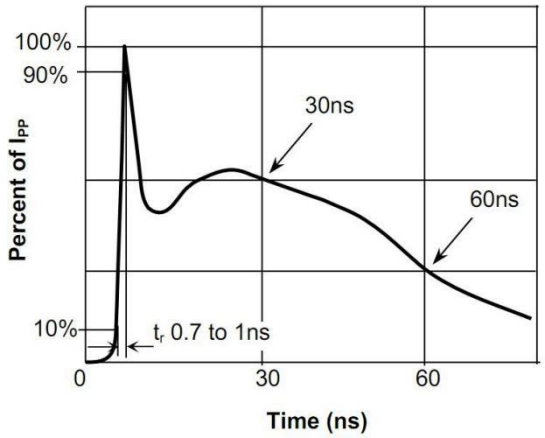


Fig.1 Pulse Waveform-ESD (IEC61000-4-2)

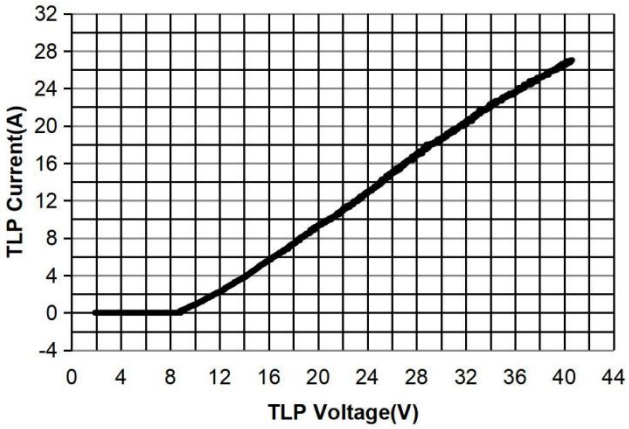


Fig.2 Transmission Line Pulse (TLP)

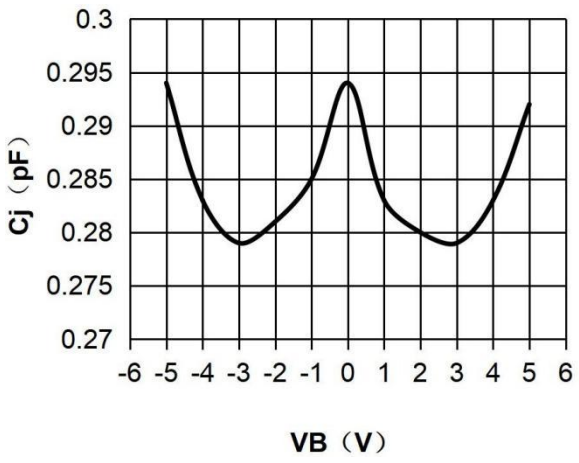


Fig.3 Capacitance vs. Reveres Voltage

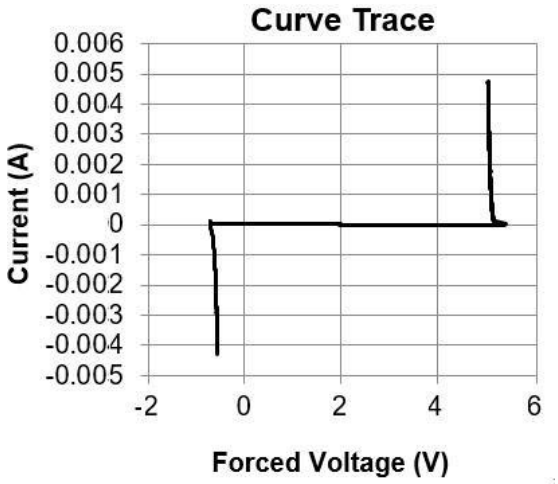
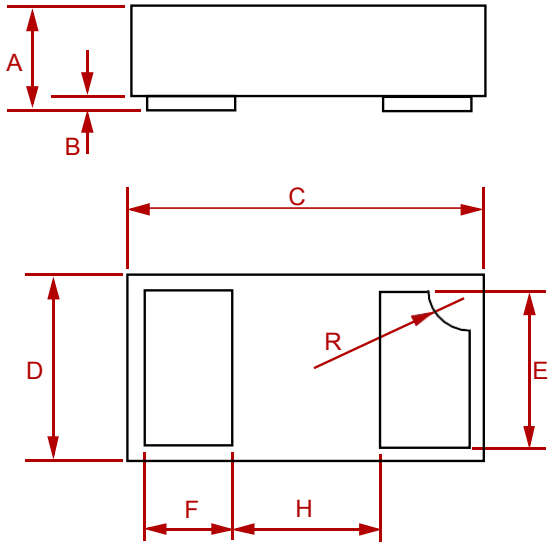


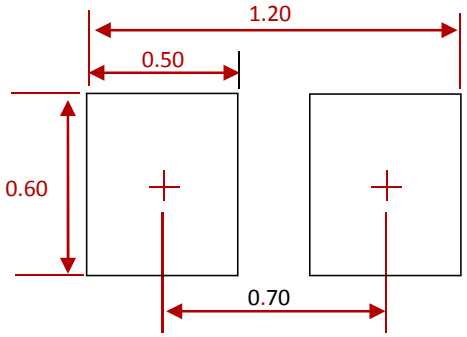
Fig.4 IV Curve

PACKAGE MECHANICAL DATA



Dim	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.0125	0.02	0.32	0.52
B	0.000	0.002	0.00	0.05
C	0.037	0.043	0.95	1.080
D	0.022	0.027	0.55	0.680
E	0.016	0.024	0.40	0.60
F	0.008	0.012	0.20	0.30
H	0.015Typ.		0.40Typ.	
R	0.001	0.005	0.05	0.15

Suggested Pad Layout



NOTES:

1. CONTROLLING DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES).
2. THIS LAND PATTERN IS FOR REFERENCE PURPOSES ONLY.
   CONSULT YOUR MANUFACTURING GROUP TO ENSURE YOUR
   COMPANY'S MANUFACTURING GUIDELINES ARE MET.

REEL SPECIFICATION

P/N	PKG	QTY
RCLAMP0521P-MS	DFN1006-2	10000

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