

MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

ESD5311N-MS

Product specification


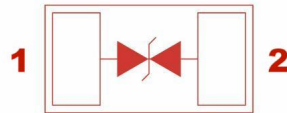

FEATURES

- 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

APPLICATIONS

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

Reference News

PACKAGE OUTLINE	PIN CONFIGURATION	Marking
 <p>DFN1006</p>		

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

Symbol	Parameter	Conditions	Min	Max	Unit
VESD	Electrostatic Discharge Voltage	IEC 61000-4-2; Contact Discharge	-	±20	kV
		IEC 61000-4-2; Air Discharge	-	±20	kV
PPp	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	°C
T _{stg}	Storage Temperature Range	-	-55	150	°C

Electrical Characteristics(TA = 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

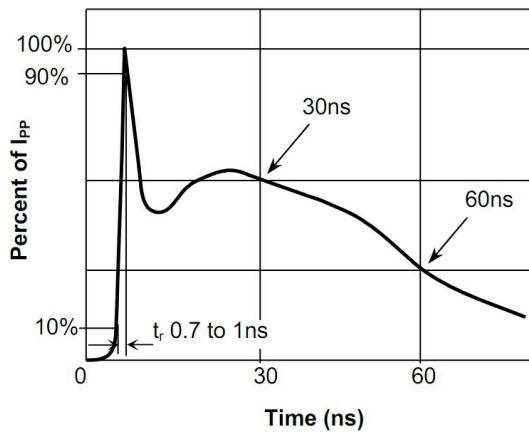


Fig.1 Pulse Waveform-ESD (IEC61000-4-2)

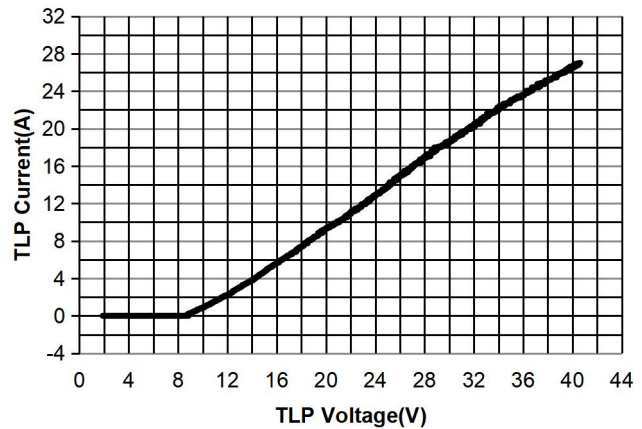
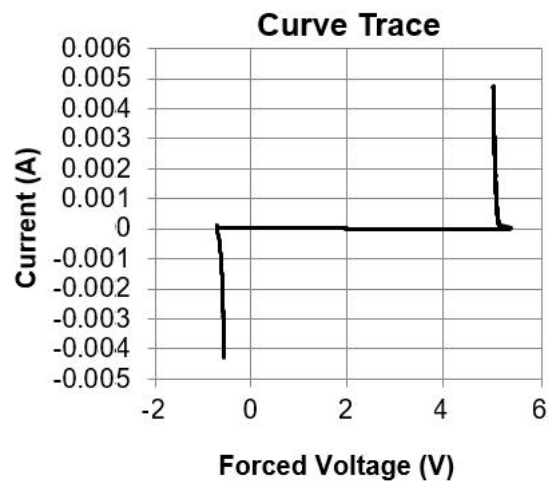
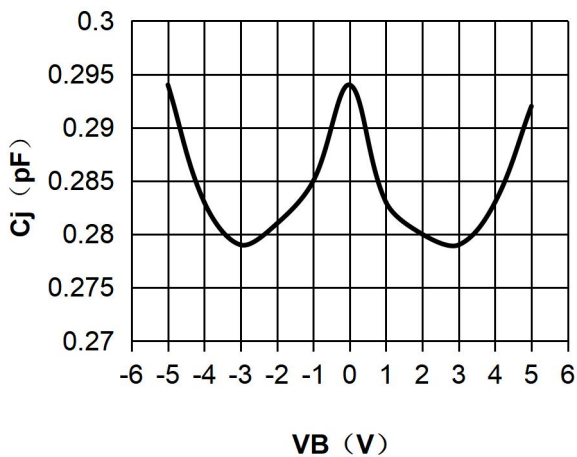
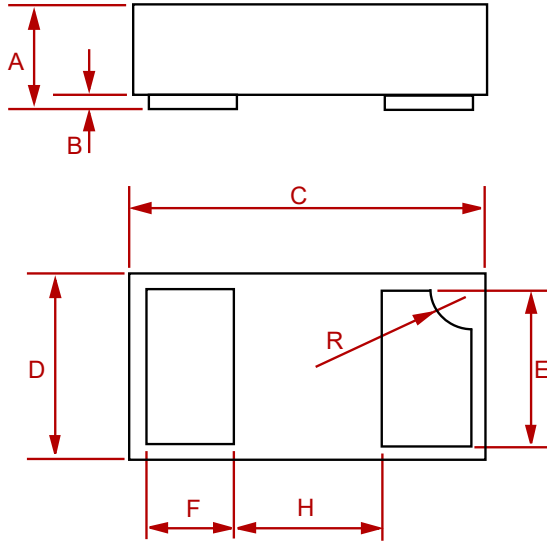


Fig.2 Transmission Line Pulse (TLP)

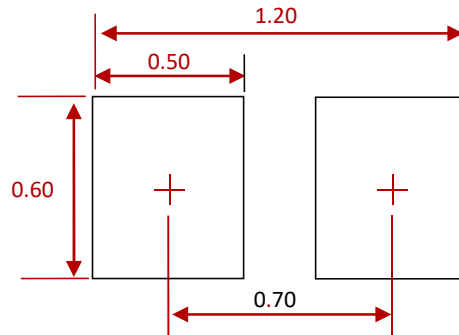


PACKAGE MECHANICAL DATA



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
ESD5311N-MS	DFN1006	10000

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