

MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

ESD9N5V-MS

Product specification

Features

- Small Body Outline Dimensions
- Low Body Height
- Peak Power up to 85 Watts @ 8 x 20 μ s Pulse
- Low Leakage current
- Response Time is Typically < 1 ns
- We declare that the material of product compliance with RoHS requirements.


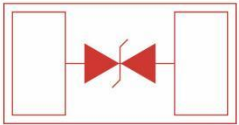

Applications

- Cellular phones
- Portable devices
- Digital cameras
- Power supplies

Absolute Ratings (Tamb=25°C)

Symbol	Parameter	Value	Units
P _{PP}	Peak Pulse Power (t _p = 8/20 μ s)	85	W
T _L	Maximum lead temperature for soldering during 10s	260	°C
T _{stg}	Storage Temperature Range	-55 to +155	°C
T _{op}	Operating Temperature Range	-40 to +150	°C
T _j	Maximum junction temperature	150	°C
	IEC61000-4-2 (ESD)	air discharge contact discharge	± 30 ± 30 KV

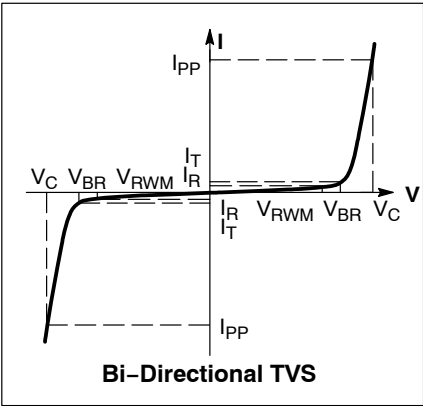
Reference News

PACKAGE OUTLINE	Circuit Diagram	Marking
		
DFN1006-2L		

Electrical Parameter

(TA = 25°C unless otherwise noted)

Symbol	Parameter
I _{PP}	Maximum Reverse Peak Pulse Current
V _C	Clamping Voltage @ I _{PP}
V _{RWM}	Working Peak Reverse Voltage
I _R	Maximum Reverse Leakage Current @ V _{RWM}
V _{BR}	Breakdown Voltage @ I _T
I _T	Test Current
P _{pk}	Peak Power Dissipation
C	Capacitance @ V _R = 0 and f = 1.0 MHz



Electrical Characteristics

Device	V _{RWM} (V)	I _R (μA) @ V _{RWM}	V _{BR} (V) @ I _T (Note 1)		I _T	V _C (V) @ I _{PP} = 1 A	V _C (V) @ I _{PP} = 8 A	I _{PP} (A)	P _{PK} (W)	C (pF)
	Max	Max	Min	Max	mA	Max	Max	Max	Max	Max
ESD9N5V-MS	5.0	0.5	5.6	8	1.0	8.5	9	10	85	20

*Surge current waveform per Figure 1.

1. V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C.

TYPICAL CHARACTERISTICS

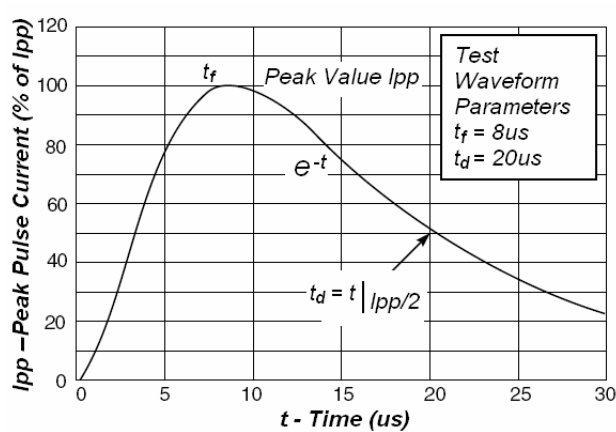


Fig1. Pulse Waveform

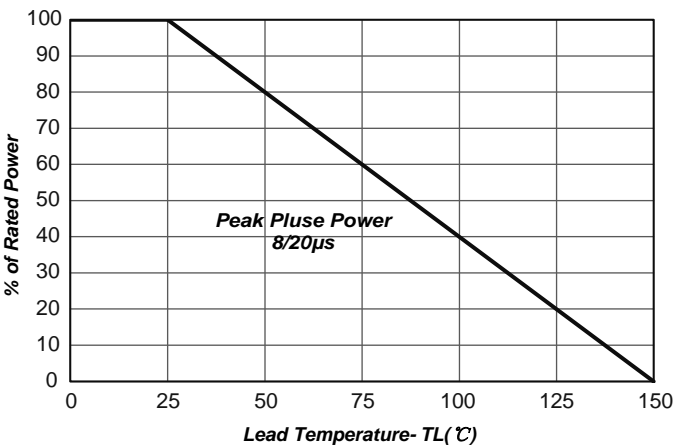


Fig2.Power Derating Curve

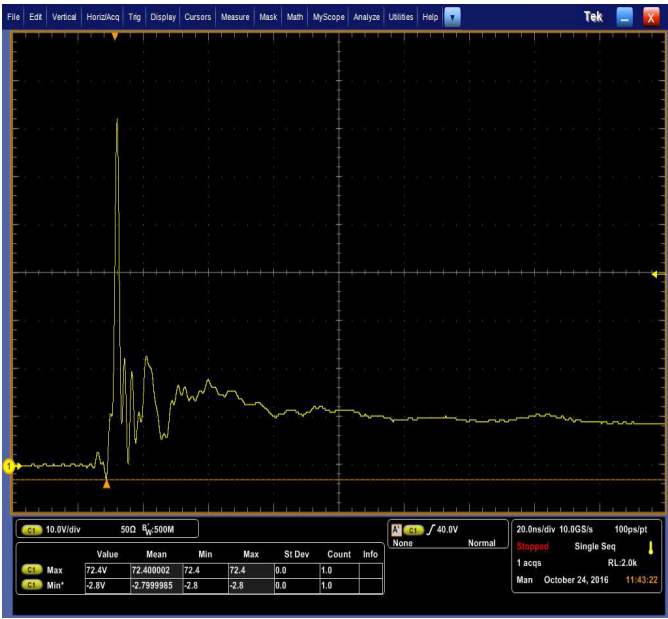


Figure 3. Positive 8kV contact per IEC 61000-4-2

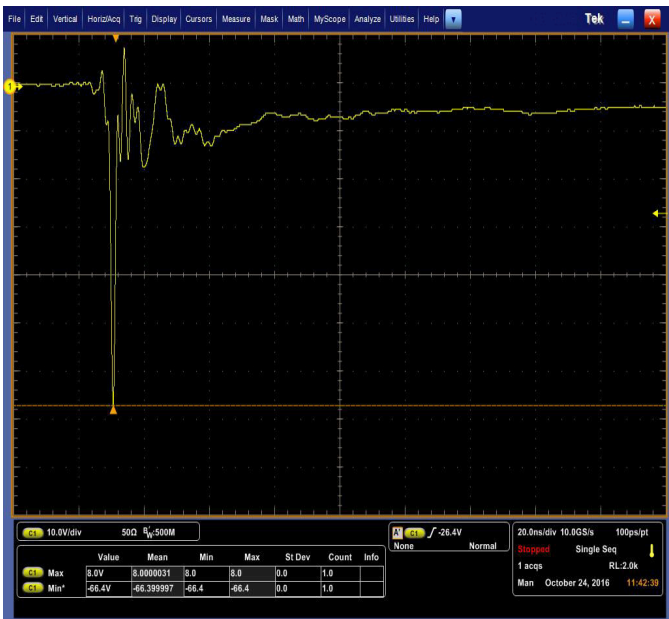


Fig 4. Negative 8kV contact per IEC 61000-4-2

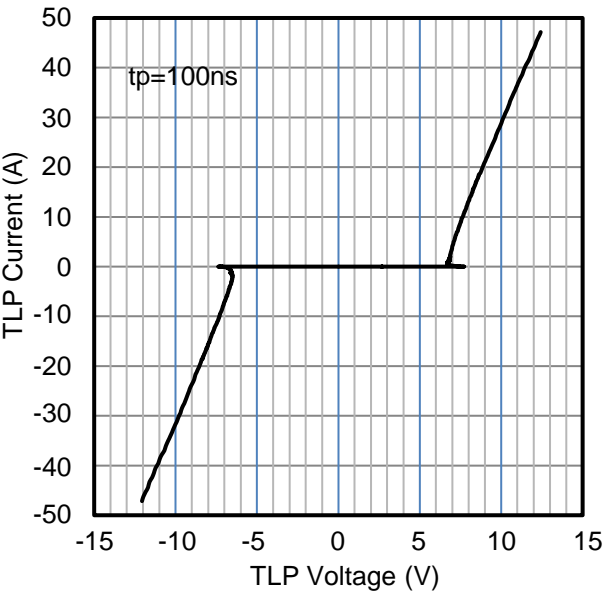
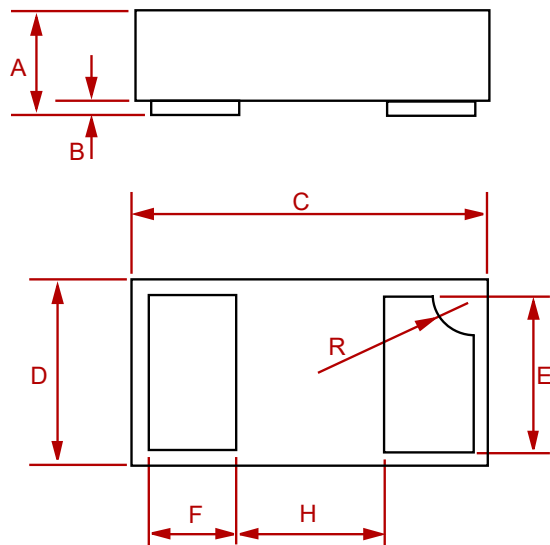


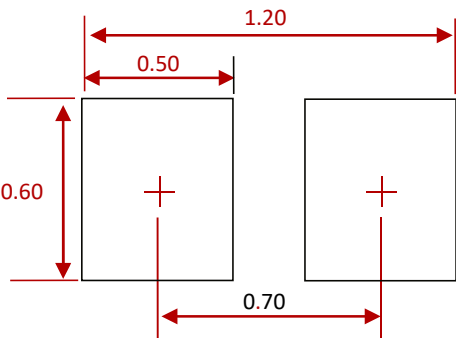
Fig5. TLP Measurement

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
ESD9N5V-MS	DFN1006-2L	10000

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