

# MSKSEMI

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

Product data sheet

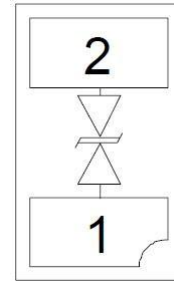
## Features

- 30W (8/20 $\mu$ s) Peak Pulse Power
- Low Capacitance ESD Protection
- DFN1006 Package
- RoHS Compliant
- Matte Tin Lead finish (Pb-Free)
- Protect One High Speed Data Line
- Meet IEC61000-4-2 Level 4:
  - Contact Discharge > 8kV
  - Air Discharge > 15kV

## Applications

- Communication System
- Portable Instrumentation
- Audio and Video Equipment
- Computers and Peripherals
- USB 1.1, USB 2.0 Ports

### PIN Diagram



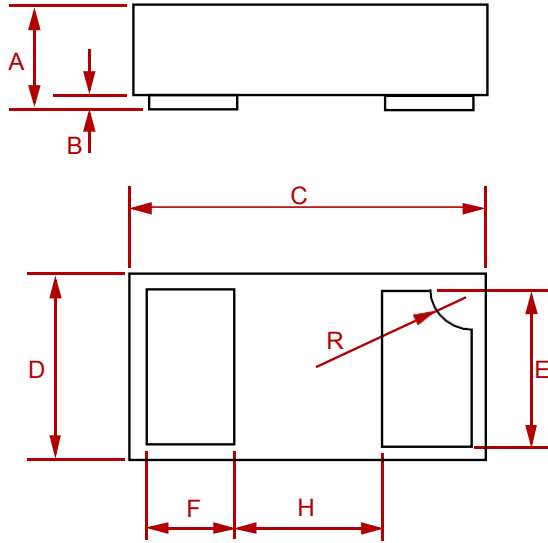
## Maximum Ratings (Ta = 25°C)

Symbol	Parameter	Value	Unit
PPK	Peak Pulse Power	30	W
IPP	Peak Pulse Current	2	A
VESD (Contact)	Contact ESD Voltage per IEC61000-4-2	8	kV
VESD (Air)	Air ESD Voltage per IEC61000-4-2	15	kV
TJ	Junction Temperature	-55 to +150	°C
TSTG	Storage Temperature	-55 to +150	°C

## Electrical Characteristics (Ta = 25°C)

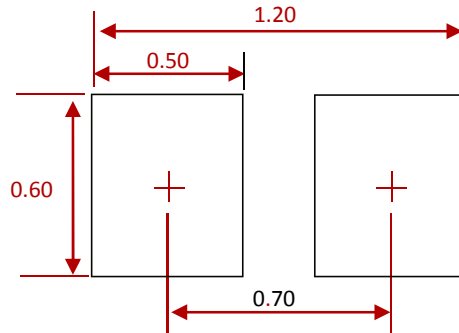
Symbol	Parameter	Conditions	Min	Typ	Max	Unit
VRWM	Reverse Working Peak Voltage				5	V
VBR	Reverse Breakdown Voltage	IT = 1mA	5.5		9.5	V
IR	Reverse Leakage Current	VRWM = 5V			0.1	$\mu$ A
VC	Clamping Voltage	IPP = 1A (8/20 $\mu$ s)			12	V
VC	Clamping Voltage	IPP = 2A (8/20 $\mu$ s)			15	V
CJ	Capacitance	VR = 0V, f = 1MHz		3.0	3.5	pF

**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
ESD9B5VL-MS	DFN1006	10000

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