

# MSKSEMI

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

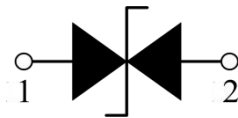
Product data sheet

[www.msksemi.com](http://www.msksemi.com)

## Features



DFN1006-2L



MARK:C\*

- Capacitance: 15pF(typ.)
- Reverse Working Voltage: 5V
- IEC 61000-4-2 (ESD Air): ±25KV
- IEC 61000-4-2 (ESD Contact): ±25KV
- IEC 61000-4-5 (Lightning 8/20µs): 8A

## Applications

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

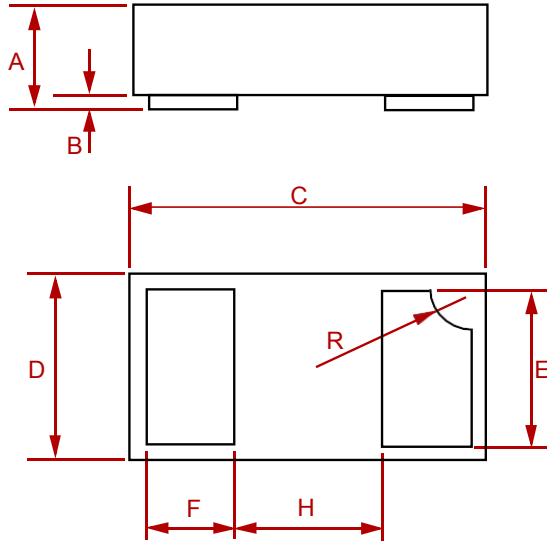
### Limiting Values( $T_A = 25\text{ }^\circ\text{C}$ , unless otherwise specified)

Symbol	Parameter	Conditions	Min	Max	Unit
$V_{ESD}$	Electrostatic Discharge Voltage	IEC 61000-4-2; Contact Discharge	-	±25	kV
		IEC 61000-4-2; Air Discharge	-	±25	kV
$P_{PP}$	Peak Pulse Power	$t_P = 8/20\ \mu\text{s}$	-	80	W
$I_{PPM}$	Rated Peak Pulse Current	$t_P = 8/20\ \mu\text{s}$	-	8	A
$T_A$	Ambient Temperature Range	-	-55	125	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-	-55	150	$^\circ\text{C}$

### Electrical Characteristics( $T_A = 25\text{ }^\circ\text{C}$ , unless otherwise specified)

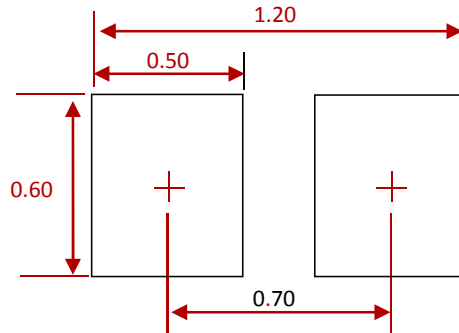
Symbol	Parameter	Conditions	Min	Typ.	Max	Unit
$V_{RWM}$	Reverse Working Voltage	$T_A = 25\text{ }^\circ\text{C}$	-	-	5.0	V
$V_{BR}$	Breakdown Voltage	$I_R = 1\text{mA}$ ; $T_A = 25\text{ }^\circ\text{C}$	5.6	6.5	8.4	V
$I_R$	Reverse Leakage Current	$V_{RWM} = 5\text{V}$ ; $T_A = 25\text{ }^\circ\text{C}$	-	-	0.1	$\mu\text{A}$
$V_C$	Clamping Voltage	$I_{PP}=1\text{A}$ , $t_P = 8/20\ \mu\text{s}$	-	-	6	V
		$I_{PP}=7\text{A}$ , $t_P = 8/20\ \mu\text{s}$	-	-	10	V
$C_J$	Junction Capacitance	$V_R = 0\text{V}$ , $f = 1\text{ MHz}$	-	15	18	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
ESD5451N-2-MS	DFN1006-2L	10000

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