

# Product data sheet

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## Features

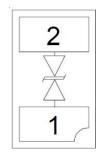
- $\diamond$  84W (8/20 $\mu$ s) Peak Pulse Power
- $\diamondsuit$  Bidirectional ESD Protection
- $\Diamond$  SOD-882 Package
- $\Diamond$  RoHS Compliant
- $\diamondsuit$  Matte Tin Lead finish (Pb-Free)
- $\diamondsuit$  Protects One Line
- Meet IEC61000-4-2 Level 4:
  Contact Discharge: 30kV
  Air Discharge: 30kV

### Applications

- $\diamondsuit$  Communication System
- $\diamondsuit$  Portable Instrumentation
- $\diamondsuit$  Audio and Video Equipment
- $\diamondsuit$  Computers and Peripherals
- $\diamondsuit$  Cellular Handsets and Accessories

Maximum Ratings (Ta =  $25^{\circ}$ C)





DFN1006

Symbol	Parameter	Value	Unit
Ррк	Peak Pulse Power	84	W
IPP	Peak Pulse Current	6	А
VESD (Contact)	Contact ESD Voltage per IEC61000-4-2	30	kV
VESD (Air)	Air ESD Voltage per IEC61000-4-2	30	kV
TJ	Junction Temperature	-55 to +150	Ĵ
TSTG	Storage Temperature	-55 to +150	Ĉ

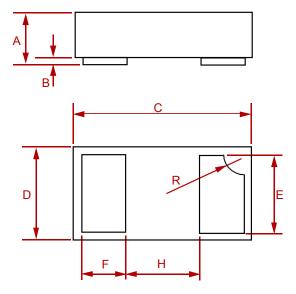
## Electrical Characteristics (Ta = 25℃)

Symbol	Parameter	Conditions	Min	Тур	Max	Unit
VRWM	Reverse Working Peak Voltage				5	V
VBR	Reverse Breakdown Voltage	IT = 1mA	6		9.5	V
IR	Reverse Leakage Current	VRWM = 5V			0.5	μA
VC	Clamping Voltage	IPP = 1A (8/20µs)			9	V
VC	Clamping Voltage	IPP = 6A (8/20µs)			14	V
CJ	Capacitance	VR = 0V, f = 1MHz			15	рF



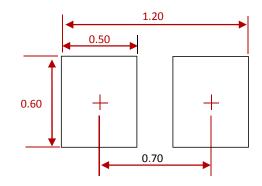
ESD9X5V-MS Semiconductor

#### PACKAGE MECHANICAL DATA



Dim	Inches		Millimeters	
Dim	MIN	MAX	MIN	МАХ
А	0.0125	0.02	0.32	0.52
В	0.000	0.002	0.00	0.05
С	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
н	0.015Typ.		0.40	Тур.
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
ESD9X5V-MS	DFN1006	10000





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