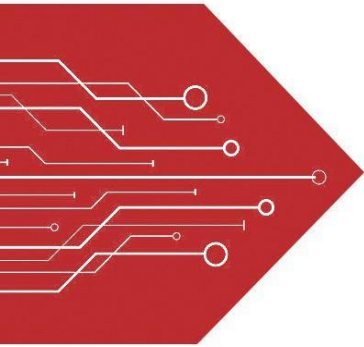
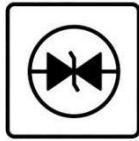


# MSKSEMI

SEMICONDUCTOR



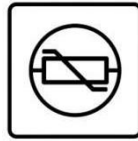
ESD



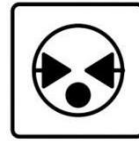
TVS



TSS



MOV

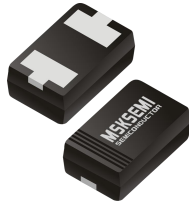


GDT



PLED

Product data sheet



DFN1006

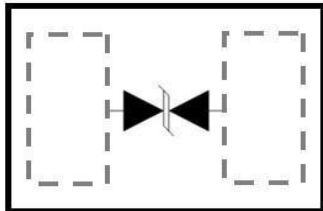
**FEATURES**

- ✧ IEC61000-4-2 (ESD) ±8kV (Contact)  
±15kV (Air)
- ✧ IEC61000-4-4 (EFT) 40A (5/50ns)
- ✧ IEC61000-4-5 (Lighting) 3A (8/20µs)
- ✧ 100 Watts Peak Pulse Power (tp=8/20µs)
- ✧ Working voltages : 24V
- ✧ Low clamping voltage
- ✧ Low leakage current

**MACHANICAL DATA**

- ✧ DFN1006 package
- ✧ Flammability Rating: UL 94V-0
- ✧ Packaging: Tape and Reel
- ✧ Reel size: 7 inch

**PIN CONFIGURATION**



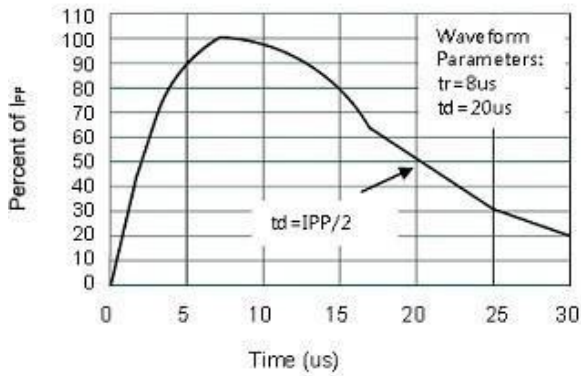
**APPLICATIONS**

- ✧ Serial and Parallel Ports
- ✧ Notebooks, Desktops, Servers
- ✧ Projection TV
- ✧ Cellular handsets and accessories
- ✧ Portable instrumentation
- ✧ Peripherals

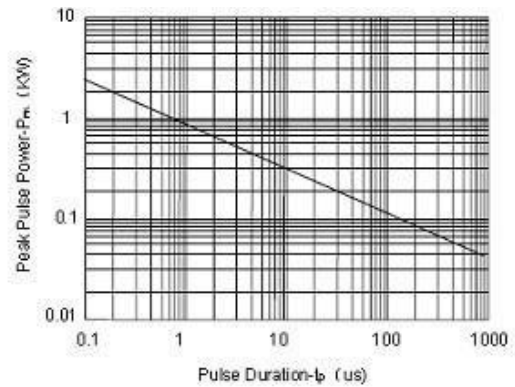
ABSOLUTE MAXIMUM RATING			
Symbol	Parameter	Value	Units
V <sub>ESD</sub>	ESD per IEC 61000-4-2 (Contact)	±8	kV
	ESD per IEC 61000-4-2 (Air)	±15	
P <sub>PP</sub>	Peak Pulse Power (8/20µs)	150	W
T <sub>OPT</sub>	Operating Temperature	-55 ~ +125	°C
T <sub>STG</sub>	Storage Temperature	-55 ~ +150	°C
T <sub>L</sub>	Lead Soldering Temperature	260 (10 sec.)	°C

ELECTRICAL CHARACTERISTICS (Tamb=25°C)						
Symbol	Parameter	Test Condition	Min	Typ	Max	Units
$V_{RWM}$	Reverse Working Voltage				24	V
$V_{BR}$	Reverse Breakdown Voltage	$I_T = 1mA$	26		32	V
$I_R$	Reverse Leakage Current	$V_{RWM} = 24V$			1	$\mu A$
$V_{C1}$	Clamping Voltage 1	$I_{PP} = 1A, t_p = 8/20\mu s$			40	V
$V_{C2}$	Clamping Voltage 2	$I_{PP} = 3A, t_p = 8/20\mu s$			50	V
$C_J$	Junction Capacitance	$V_R = 0V, f = 1MHz$		8		pF

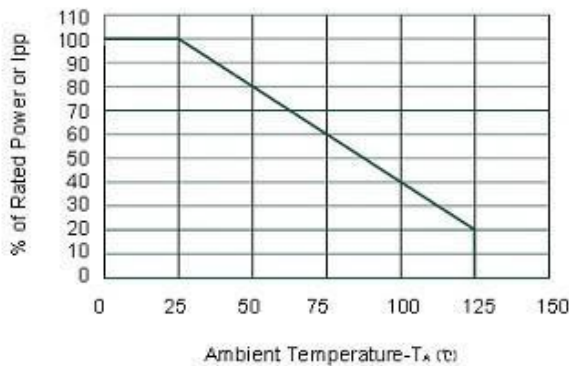
**ELECTRICAL CHARACTERISTICS CURVE**



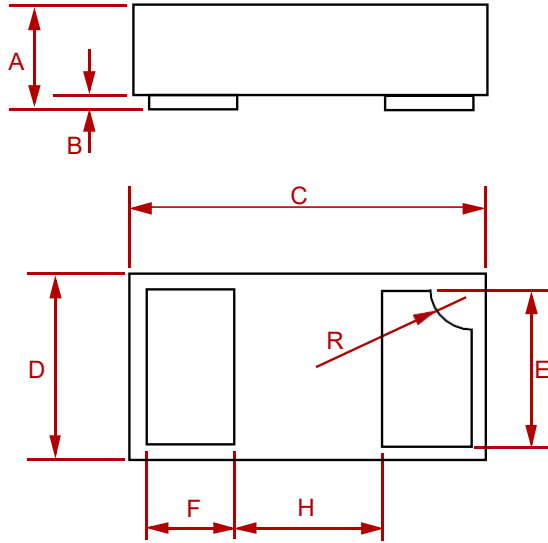
Pulse Waveform



Non- Repetitive Peak Pulse Power vs. Pulse Time

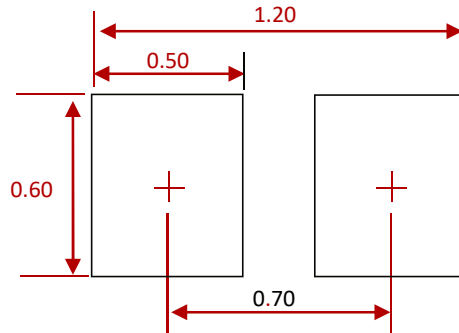


**PACKAGE MECHANICAL DATA**



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
MSESD10EMC24	DFN1006	10000

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