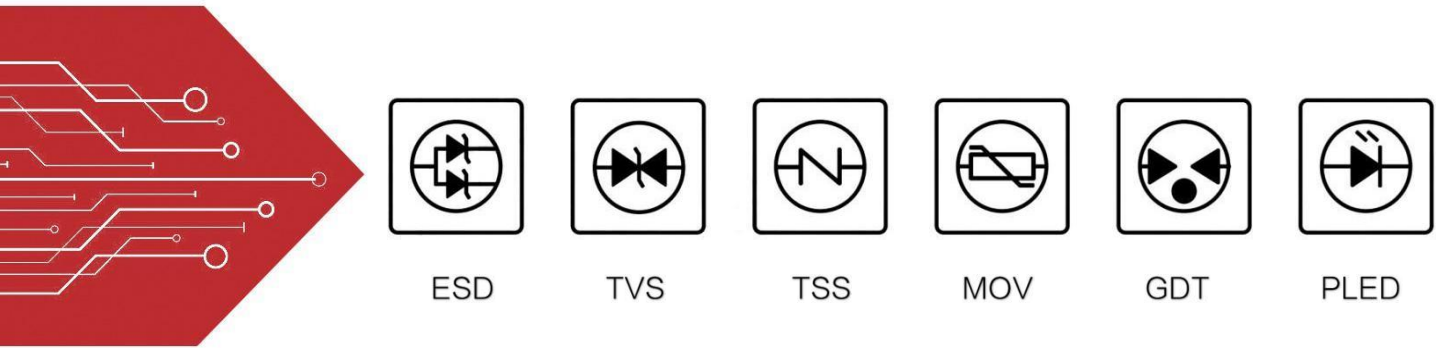
MSKSEMI
SEMICONDUCTOR



Product data sheet

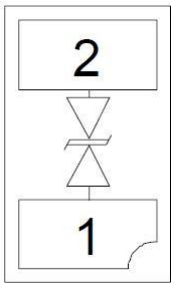
www.msksemi.com

Features

◇ 30W (8/20μs) Peak Pulse Power
◇ Low Capacitance ESD Protection
◇ SOD-882 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

Circuit Diagram

PIN Diagram



SOD-882

Applications

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

Ordering information

Device	Package	Reel Size	Qty / Reel
MSESD0511T	SOD-882	7 inch	10000

Maximum Ratings (Ta = 25℃)

Symbol	Parameter	Value	Unit
P_{PK}	Peak Pulse Power	60	W
I_{PP}	Peak Pulse Current	4	A
V_{ESD} (Contact)	Contact ESD Voltage per IEC61000-4-2	8	kV
V_{ESD} (Air)	Air ESD Voltage per IEC61000-4-2	15	kV
TJ	Junction Temperature	-55 to +150	℃
TSTG	Storage Temperature	-55 to +150	℃

Electrical Characteristics (Ta = 25℃)

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	μA
VC	Clamping Voltage	IPP = 1A (8/20μs)			12	V
VC	Clamping Voltage	IPP = 2A (8/20μs)			15	V
CJ	Capacitance	VR = 0V, f = 1MHz			0.5	pF

Typical Performance Curves

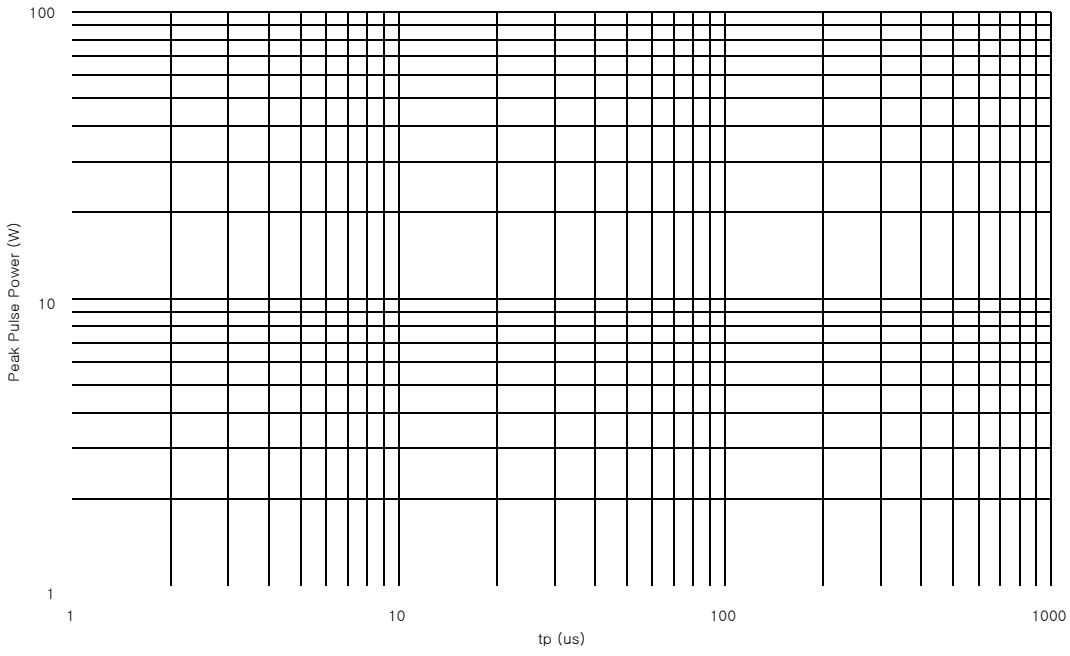
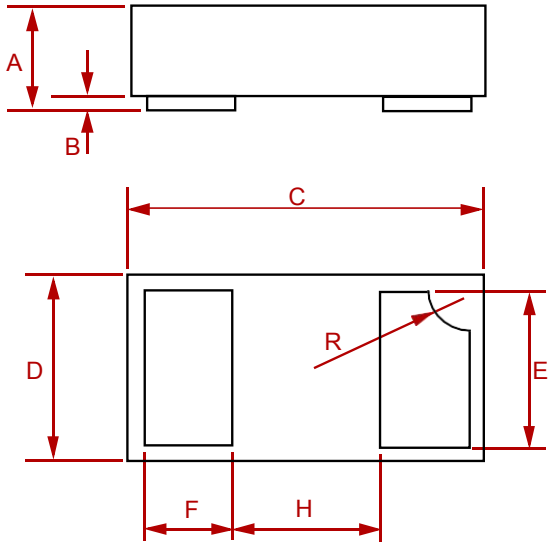


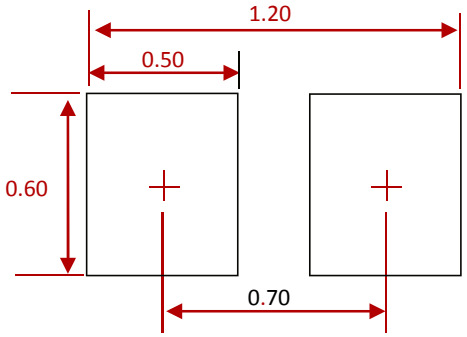
Figure 1. Peak Pulse Power Derating

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
MSESD0511T	SOD-882	10000

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