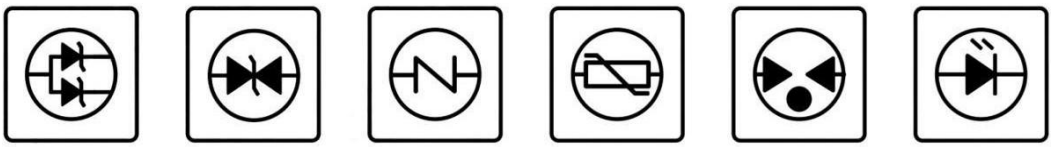
MSKSEMI 美森科
SEMICONDUCTOR



TPD1E10B06DPYR-MS

Product specification

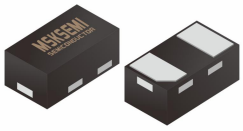
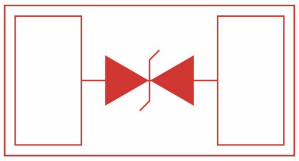
Features

- 80Watts peak pulse power (tp = 8/20μs)
- Transient protection for high speed data lines to
  IEC 61000-4-2 (ESD) ± (air), ± (contact)
  IEC 61000-4-4 (EFT) 40A (5/50ns)
- Working voltages : 5V
- Protects One Power or I/O Port
- Low operating and clamping voltages
- Solid-state silicon avalanche technology

Applications

- Notebooks, Desktops, Servers and Video Graphics Cards
- USB Power & Data Line Protection
- Monitors and Flat Panel Displays
- I²C Bus Protection
- Portable Instrumentation
- Set Top Box

Reference News

PACKAGE OUTLINE	Pin Configuration	Marking
		
X1SON-2		

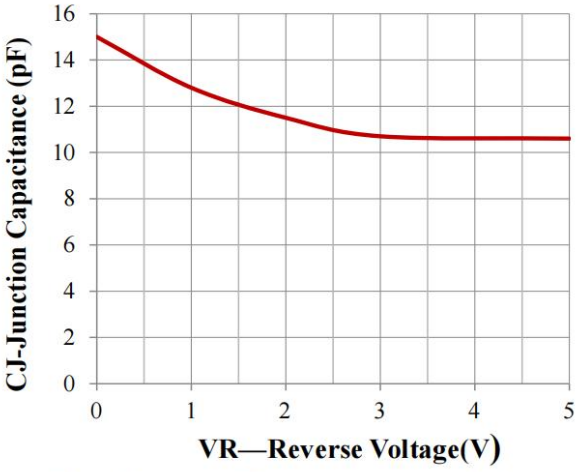
Maximum Rating @ Ta=25C unless otherwise specified

Symbol	Parameter	Ratings	Units
P_{PK}	Peak Pulse Power (tp = 8/20μs)	80	Watts
T_L	Lead Soldering Temperature	260(10sec.)	℃
T_J	Operating Temperature	-55 to + 125	℃
T_{STG}	Storage Temperature	-55 to + 150	℃

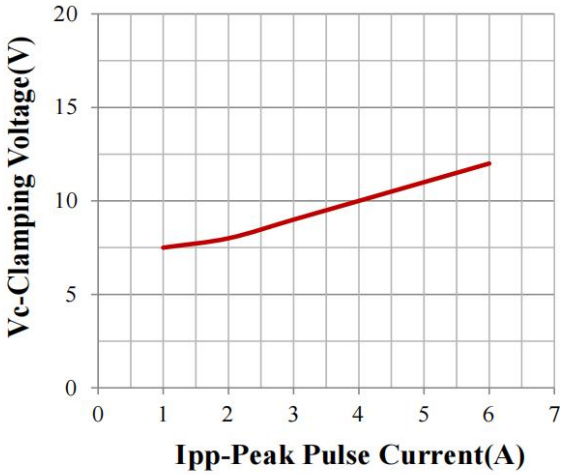
Electrical Characteristics @ Ta=25C unless otherwise

Parameter	V_{RWM} @ I_R		V_{BR}@ ImA	V_C@ 1	V_C@ I_{PP}		C_J
	V	A	V	V	V	A	F
		MAX	MIN	MAX	MAX		TYP
TPD1E10B06DPYR-MS	5	1	5.8	11.8	15	5	12

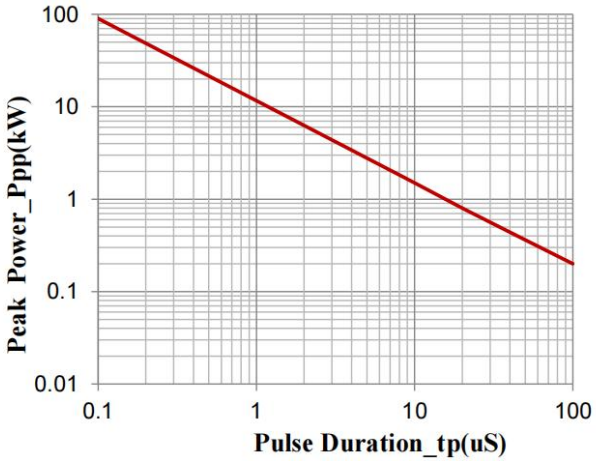
TypicalCharacteristics@Ta=25℃unlessotherwisespecified



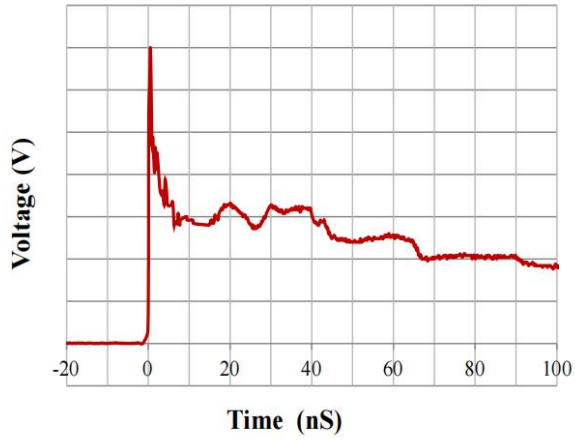
Junction Capacitance vs. Reverse Voltage



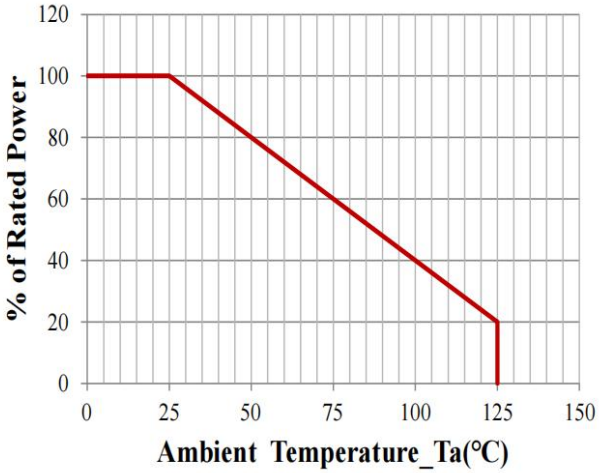
Clamping Voltage vs. Peak Pulse Current



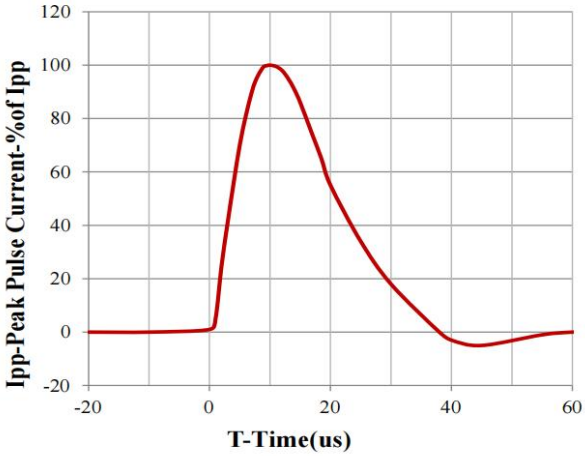
Peak Pulse Power vs. Pulse Time



IEC61000-4-2 Pulse Waveform

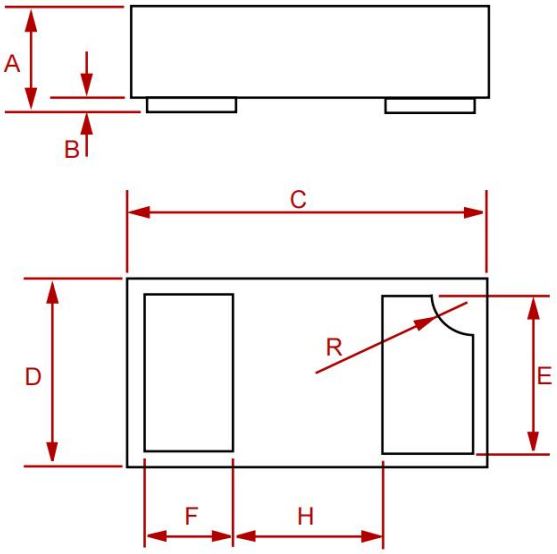


Power Derating Curve



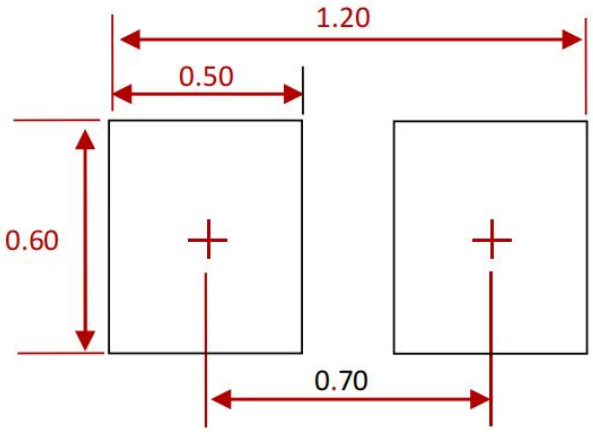
8 X 20us Pulse Waveform

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



Note:

1.Controlling dimension:in millimeters.

2.General tolerance:±0.05mm.

3.The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
TPD1E10B06DPYR-MS	X1SON-2	10000

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