

# MSKSEMI

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT

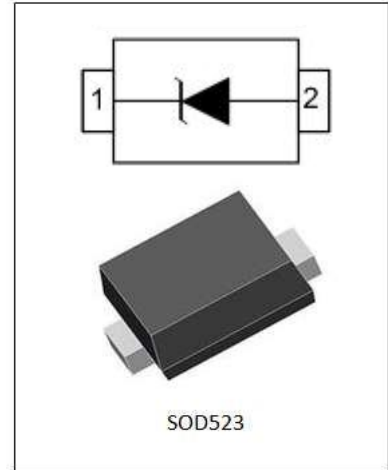


PLED

Product data sheet

## Features

- ◆ 150 Watts peak pulse power ( $t_p = 8/20\mu s$ )
- ◆ Transient protection for high speed data lines to IEC 61000-4-2 (ESD)  $\pm 15kV$  (air),  $\pm 8kV$  (contact) IEC 61000-4-4 (EFT) 40A (5/50ns)
- ◆ Working voltages : 12V
- ◆ 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
- ◆ I<sup>2</sup>C Bus Protection
- ◆ Portable Instrumentation
- ◆ Set Top Box

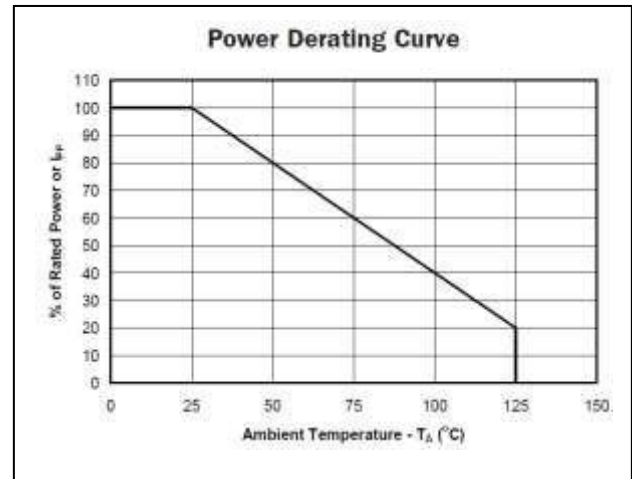
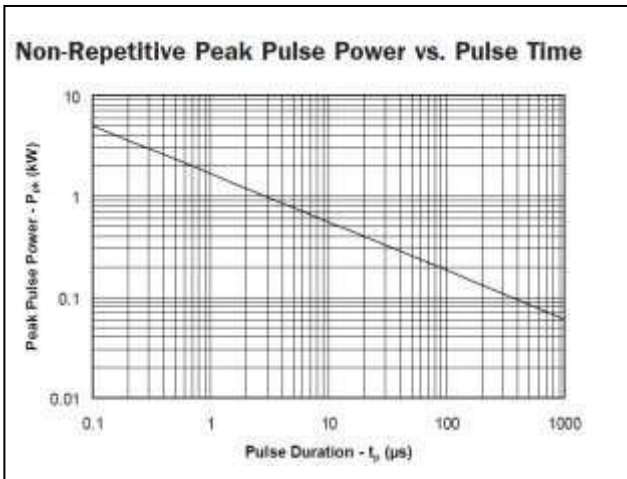
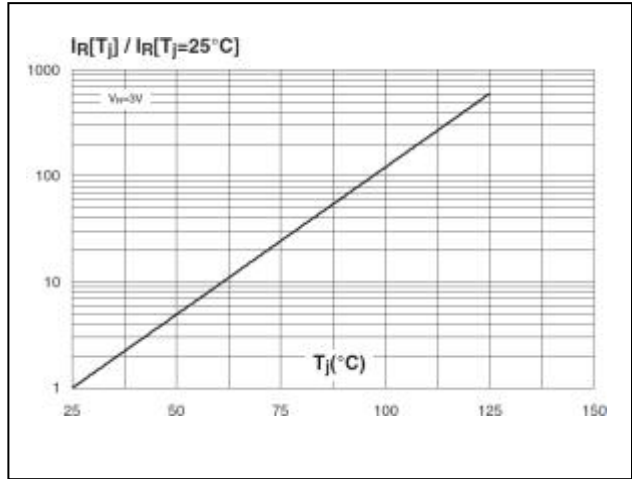
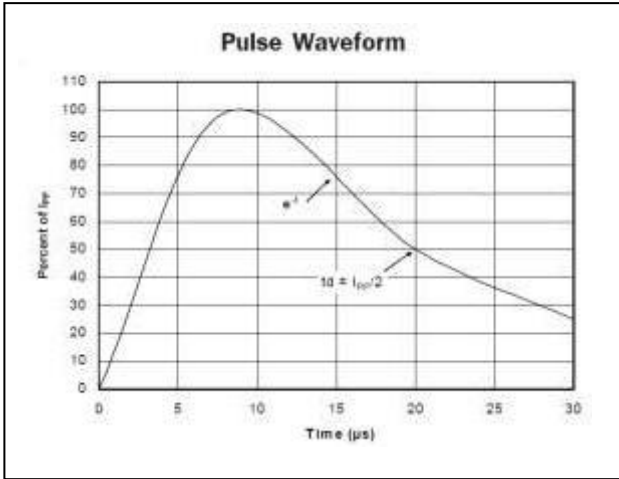
## Electrical Characteristics @ Ta=25°C unless otherwise

P/N	VRWM @IR		VBR@ImA	Vc@1	Vc@IPP		CJ
	V	$\mu A$	V	V	V	A	pF
		MAX	MIN	MAX	MAX		MAX
PESD12VS1UB	12	1	13.3	19	25	6	70

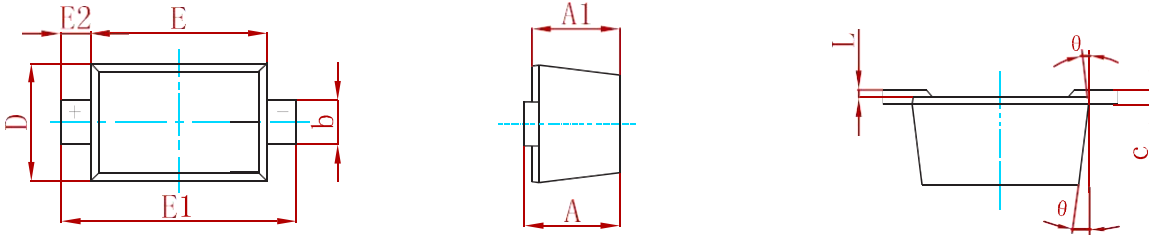
## Maximum Rating @ Ta=25°C unless otherwise specified

Symbol	Parameter	Ratings	Units
P <sub>PK</sub>	Peak Pulse Power ( $t_p = 8/20\mu s$ )	150	Watts
T <sub>L</sub>	Lead Soldering Temperature	260(10sec.)	°C
T <sub>J</sub>	Operating Temperature	-55 to +125	°C
T <sub>STG</sub>	Storage Temperature	-55 to +150	°C

Typical Characteristics @  $T_a=25^\circ\text{C}$  unless otherwise specified

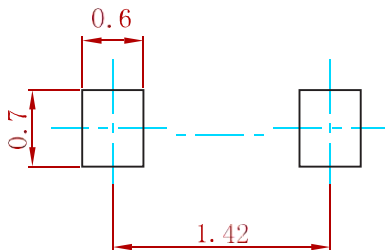


**PACKAGE MECHANICAL DATA**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
0	7° REF		7° REF	

**Suggested Pad Layout**



- Note:
1. Controlling dimension: in millimeters.
  2. General tolerance:  $\pm 0.05\text{mm}$ .
  3. The pad layout is for reference purposes only.

**REEL SPECIFICATION**

P/N	PKG	QTY
PESD12VS1UB-MS	SOD-523	3000

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