

# MSKSEMI

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT

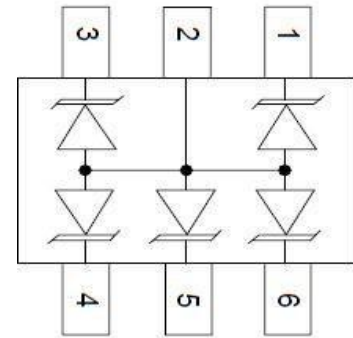


PLED

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 : 5V
- ◆ Protects five I/O lines
- ◆ Low operating and clamping voltages
- ◆ Solid-state silicon avalanche technology



SC-89

## 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

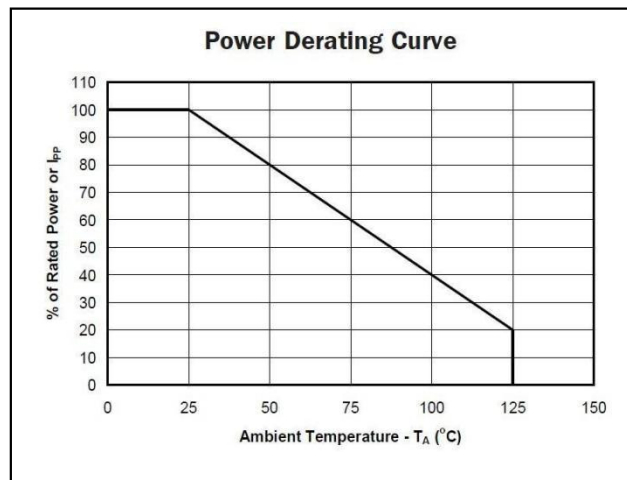
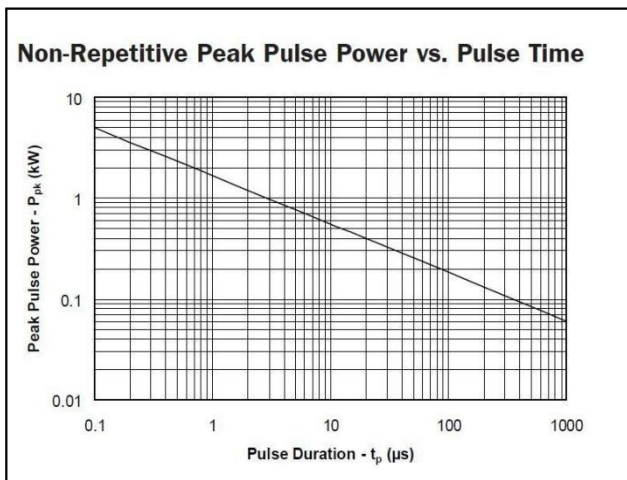
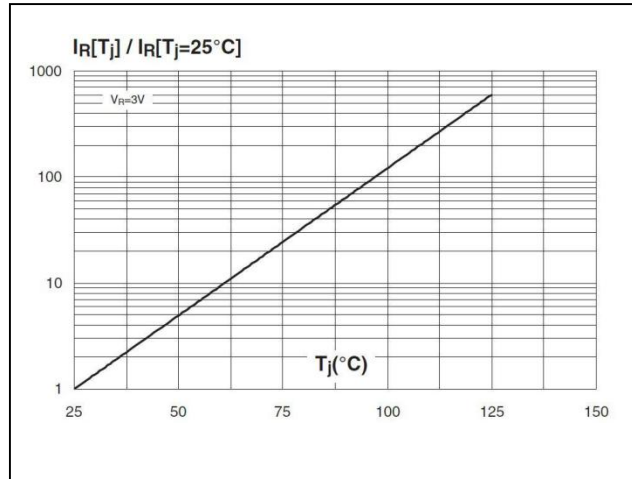
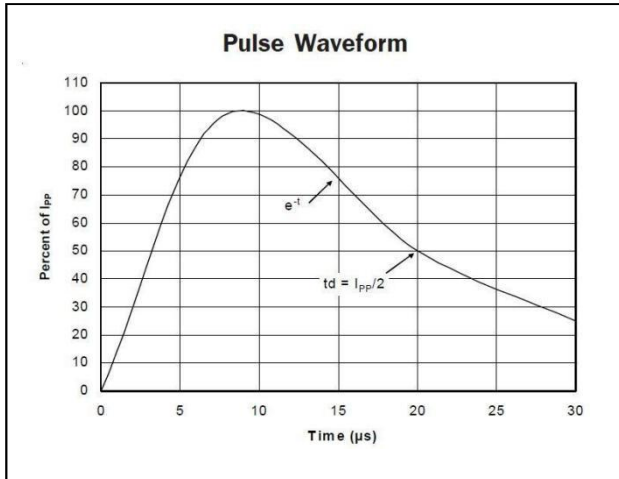
## Electrical Characteristics@ Ta=25°C unless otherwise

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Units
V <sub>RWM</sub>	Reverse Working Voltage	Any I/O to Ground			5.0	V
V <sub>BR</sub>	Reverse Breakdown Voltage	I <sub>T</sub> = 1mA, Any I/O to Ground	6.2			V
I <sub>R</sub>	Reverse Leakage Current	V <sub>RWM</sub> = 5V, Any I/O to Ground			1	μA
V <sub>C</sub>	Clamping Voltage	I <sub>PP</sub> = 1A, $t_p = 8/20\mu s$ , any I/O pin to Ground			10	V
		I <sub>PP</sub> = 3A, $t_p = 8/20\mu s$ , any I/O pin to Ground			15	V
C <sub>J</sub>	Junction Capacitance	V <sub>R</sub> = 0V, f = 1MHz,			10	pF

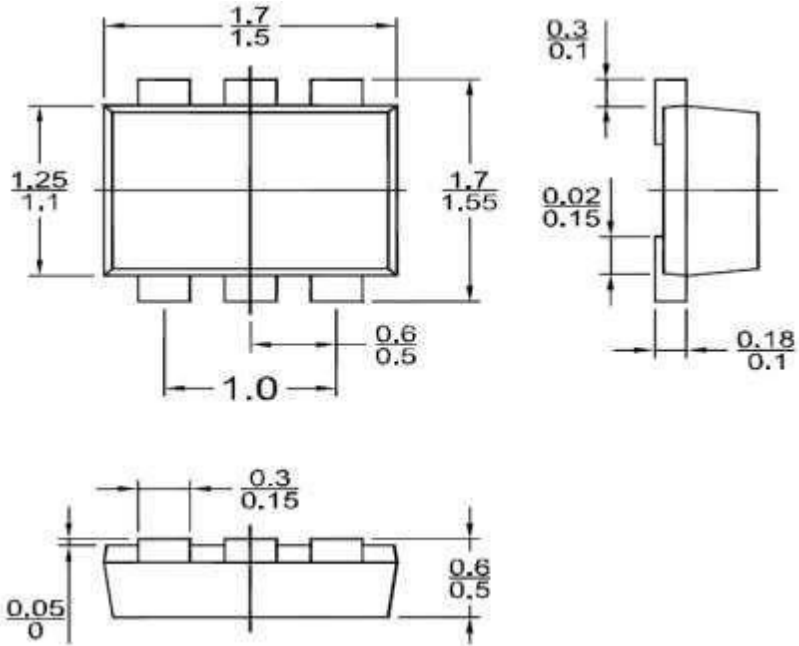
## Maximum Rating @ Ta=25°C unless otherwise specified

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

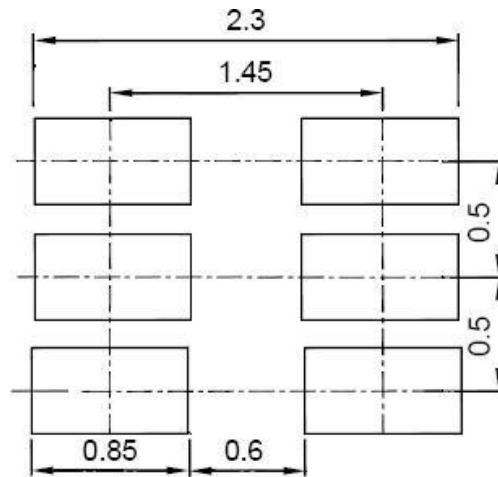
Typical Characteristics @  $T_a=25^\circ\text{C}$  unless otherwise specified



**PACKAGE MECHANICAL DATA**



**Soldering Footprint**



**REEL SPECIFICATION**

P/N	PKG	QTY
PDY0503005-MS	SC-89	3000

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