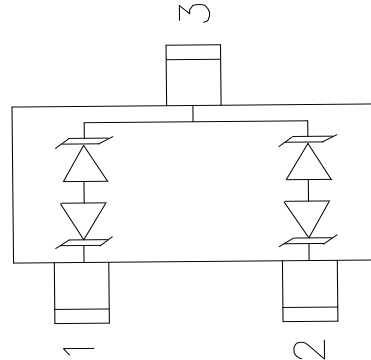


## Features

- 150 W 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 one bidirectional line or two unidirectional lines
- Low operating and clamping voltages
- Solid-state silicon avalanche technology



## Applications

- USB Power & Data Line Protection
- Monitors and Flat Panel Displays
- I<sup>2</sup>C Bus Protection
- Portable Instrumentation
- Set Top Box

## Mechanical Characteristics

- Package: SOT23
- Lead Finish: Matte Tin
- UL Flammability Classification Rating 94V-0
- Pb-Free, Halogen Free, RoHS/WEEE Compliant

### Absolute Maximum Ratings ( $T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power(8/20 $\mu s$ )	Ppk	150	W
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	VESD	$\pm 15$ $\pm 8$	kV
Operating Temperature Range	TJ	-55 to +125	$^\circ C$
Storage Temperature Range	Tstg	-55 to +150	$^\circ C$

**Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise specified)**

Part Number	V <sub>RWM</sub>	IDRM	VBR	IR	VC	IPP	VC	IPP	CO
	V	μA	V	mA	V	A	V	A	pF
		MAX	MIN		MAX		MAX		MAX
SM05	5	1	6	1	9.8	1	15	10	100

Typical Characteristics

Fig1. 8/20μs Pulse Waveform

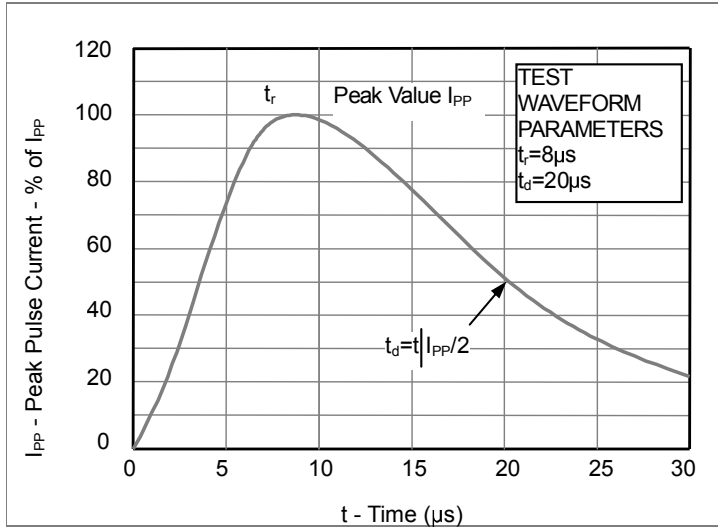


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

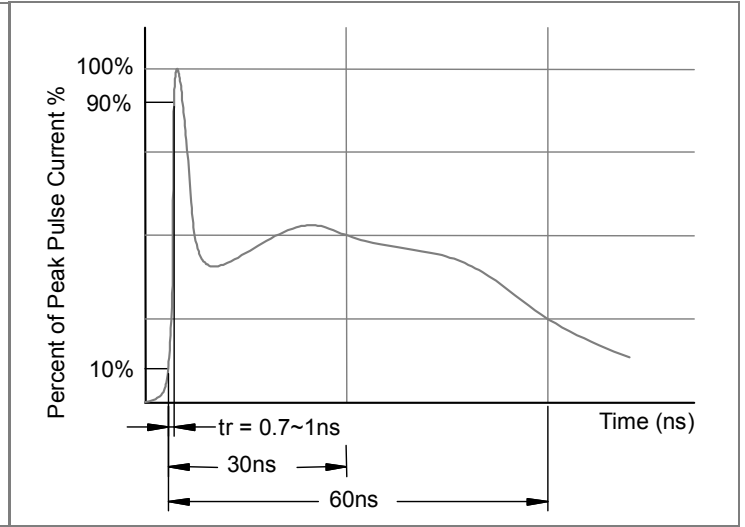
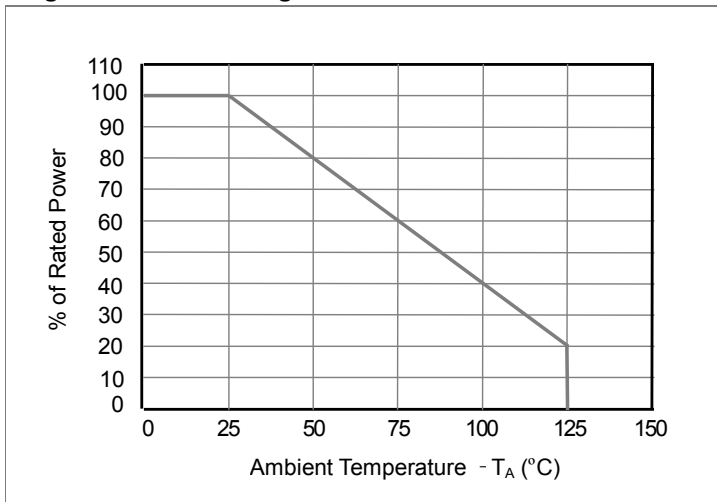
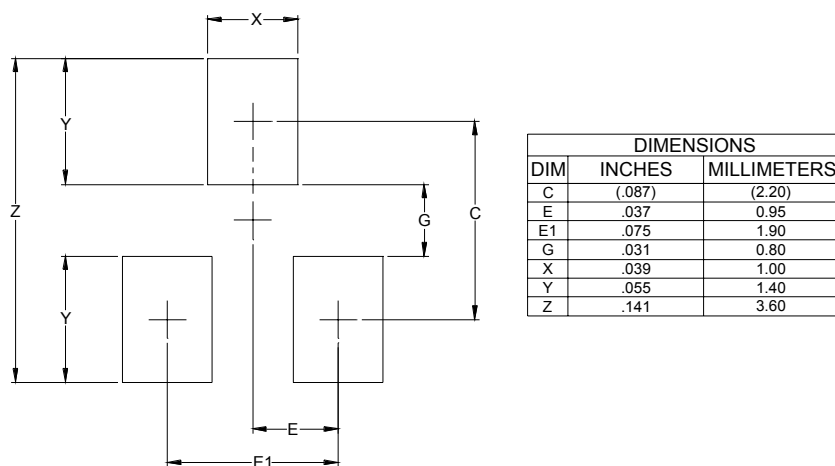


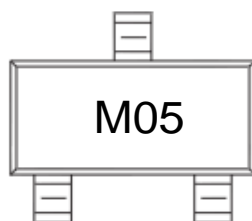
Fig3. Power Derating Curve



### Outline Drawing - SOT23



### Marking



### Ordering information

Order code	Package	Base qty	Delivery mode
UMW SM05.TCT	SOT-23	3000	Tape and reel

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