

# **UMW SM05.TCT**

TVS Diode Array

#### 1.Features

- 150W peak pulse power (t<sub>p</sub>=8/20µs)
- Transient protection for high speed data lines to IEC 61000-4-2 (ESD) ±15kV (air), ±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

### 2.Applications

- USB Power & Data Line Protection
- Monitors and Flat Panel Displays
- I2C Bus Protection
- Portable Instrumentation
- Set Top Box

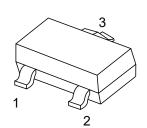
### 3. Mechanical Characteristics

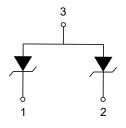
■ Package: SOT23

■ Lead Finish: Matte Tin

- UL Flammability Classification Rating 94V-0
- Pb-Free, Halogen Free, RoHS/WEEECompliant

## 4. Pinning information





**SOT-23** 





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## **5.Absolute Maximum Ratings (T<sub>A</sub>=25°C unless otherwise specified)**

Parameter	Symbol	Value	Units
Peak pulse power (8/20µs)	P <sub>PK</sub>	150	W
ESD per IEC 61000-4-2 (Air)		±15	kV
ESD per IEC 61000-4-2 (Contact)	$V_{ESD}$	±8	kV
Junction Temperature Range	TJ	-55 to 125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to 150	°C

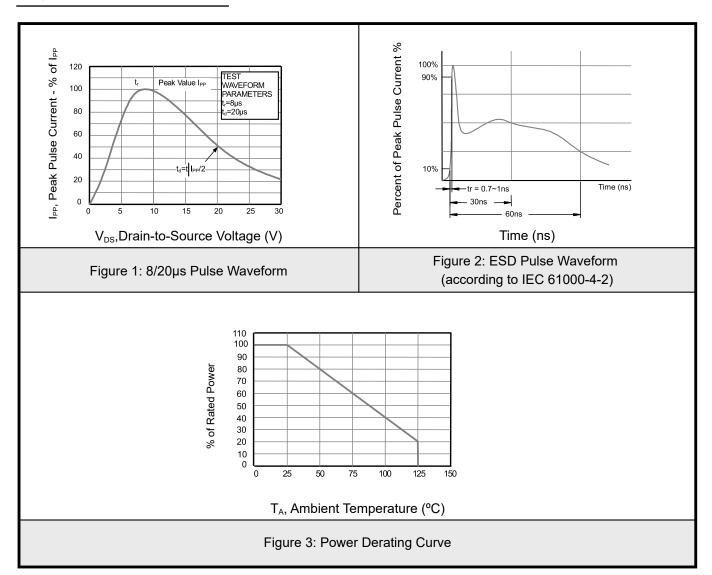
# 6.Electrical Characteristics ( $T_A$ =25°C unless otherwise specified)

	V <sub>RWM</sub>	I <sub>DRM</sub>	<b>V</b> <sub>BR</sub>	I <sub>R</sub>	V <sub>c</sub>	I <sub>PP</sub>	V <sub>c</sub>	I <sub>PP</sub>	Co
Part Number	V	μΑ	V	mA	<b>V</b>	Α	٧	Α	рF
		MAX	MIN		MAX		MAX		MAX
SM05	5	1	6	1	9.8	1	15	10	100





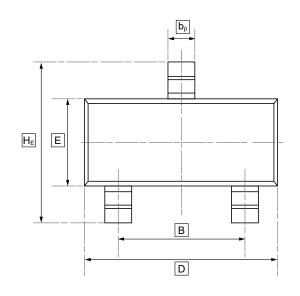
## 7. Typical characteristic

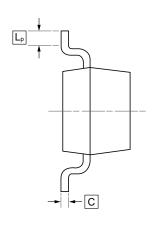


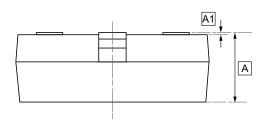


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## **8.SOT-23 Package Outline Dimensions**







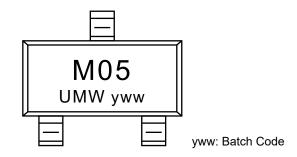
### **DIMENSIONS** (mm are the original dimensions)

Symbol	Α	В	þр	С	D	E	HE	<b>A</b> 1	Lp
Min	0.95	1.78	0.35	0.08	2.70	1.20	2.20	0.013	0.20
Max	1.40	2.04	0.50	0.19	3.10	1.65	3.00	0.100	0.50



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## 9. Ordering information



Order Code	Package	Base QTY	Delivery Mode	
UMW SM05.TCT	SOT-23	3000	Tape and reel	

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#### 10.Disclaimer

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