

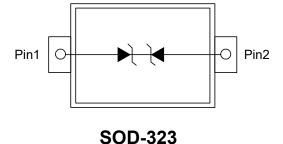
# **UMW ESD3Z5V0**

#### 1.Features

- 300 Watts peak pulse power (t<sub>p</sub>=8/20µs)
- Transient protection for data lines to IEC 61000-4-2 (ESD) ±15kV (air), ±8kV
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 24A (8/20 μs)
- Small package for use in portable electronics
- Suitable replacement for MLV's in ESD protection applications

- Small Body Outline Dimensions
- Protects one I/O or power line
- Low clamping voltage
- Working voltages: 5V and 36V
- Low leakage current
- Solid-state silicon-avalanche technology
- We declare that the material of product compliance with RoHS requirements

### 2.Pinning information









# 3.Absolute Maximum Ratings T<sub>A</sub>= 25°C

Parameter		Symbol	Maximum	Units
Peak Pulse Power (tp=8/20s)		P <sub>PP</sub>	300	W
Maximum lead temperature for soldering during 10s	T <sub>L</sub>	260	°C	
Storage Temperature Range		T <sub>STG</sub>	-55 to 155	°C
Junction Temperature		T <sub>OP</sub>	-40 to 125	°C
Maximum junction temperature		TJ	150	°C
JEC64000 4 2 (ESD)	air discharge		±15	kV
IEC61000-4-2 (ESD)	contact discharge		±8	kV
IEC61000-4-4(EFT)			40	Α
ESD Voltage Per H	uman Body Model		16	kV





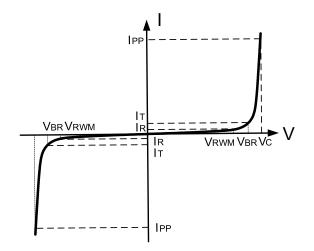


# 4.Electrical Characteristic ( $T_A$ =25°C unless otherwise noted)

Device	Device Marking	VRWM (V)	I <sub>R</sub> (uA) V <sub>RWM</sub>	V <sub>BR</sub> (V) I <sub>T</sub> (Note1)	Ι <sub>τ</sub>	V <sub>c</sub> (V) I <sub>PP</sub> =5A*	V <sub>c</sub> (V) Max=I <sub>PP</sub> *	I <sub>PP</sub> (A)*	P <sub>PK</sub> (W)*	C (pF)
	9	Max	Max	Min	mA	Тур	Max	Max	Max	Тур
ESD3Z5V0	3M	5	1	5.6	1	11.6	18.6	9.4	174	35

#### Notes:

## 5.Electrical Parameters ( $T_A$ =25°C unless otherwise noted)



Symbol	Parameter
I <sub>PP</sub>	Maximum Reverse Peak Pulse Current
Vc	Clamping Voltage @ I <sub>PP</sub>
$V_{RWM}$	Working Peak Reverse Voltage
I <sub>R</sub>	Maximum Reverse Leakage Current @ V <sub>RWM</sub>
I <sub>T</sub>	Test Current
$V_{BR}$	Breakdown Voltage @ I <sub>⊤</sub>

<sup>\*</sup>Surge current waveform per Figure 1.

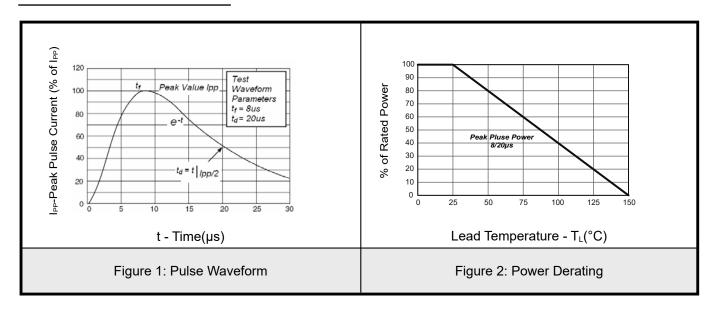
<sup>1.</sup> VBR is measured with a pluse test current IT at an ambient temperature of 25°C.







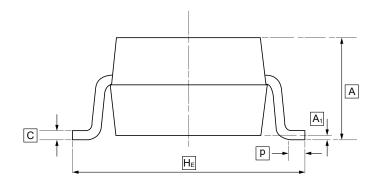
## 6. Typical characteristic

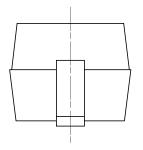


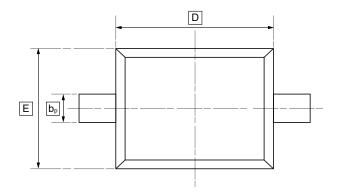




## 7.SOD-323 Package Outline Dimensions







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

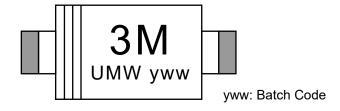
Symbol	Α	bр	С	D	E	HE	<b>A</b> <sub>1</sub>	Р
Min	0.90	0.25	0.10	1.60	1.15	2.30	0.01	0.20
Max	1.20	0.40	0.15	1.80	1.35	2.80	0.10	0.50







## 8. Ordering information



Order Code	Package	Base QTY	Delivery Mode		
UMW ESD3Z5V0	SOD-323	3000	Tape and reel		

# **UMW ESD3Z5V0**







#### 9.Disclaimer

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