UMW ESD5491S

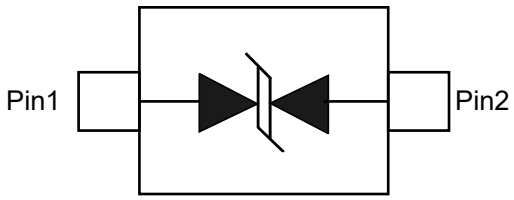
1.Features

- Low operating voltage : ±3.3V
- Ultra low capacitance : 15pf typical
- Ultra low leakage : nA level
- Low clamping voltage
- 2-pin leadless package
- Complies with following standards
- -IEC 61000-4-2 (ESD) immunity test
  Air discharge : ±30kV
  Contact discharge : ±30kV
  -IEC61000-4-5 (Lightning) 9A (8/20μs)
- These are Pb-free Devices
- Response Time is Typically < 1ns

2.Applications

- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation
- Digital Cameras
- Peripherals

3.Pinning information



SOD-523

4.Absolute Maximum Ratings

Parameter	Symbol	Value	Units
Peak Pulse Power (t_p=8/20μs)	P_{PK}	100	W
Peak Pulse Current (t_p=8/20μs)	I_{PP}	9	A
ESD per IEC 61000-4-2(Air)	V_{ESD}	±30	kV
ESD per IEC 61000-4-2(Contact)		±30	kV
Junction Temperature Range	T_J	-55 to 125	°C
Storage Temperature	T_{STG}	-55 to 150	°C

5.Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Working Voltage	V_{RWM}				3.3	V
Breakdown Voltage	V_{BR}	I_T=1mA	4			V
Reverse Leakage Current	I_R	V_{RWM}=3.3V			0.1	uA
Clamping Voltage	V_C	I_{PP}=1A(8x 20μs pulse)		7.5		V
Clamping Voltage	V_C	I_{PP}=9A(8x 20μs pulse)			13	V
Junction Capacitance	C_J	V_R=0V, f=1MHz		15		pF

6.Typical characteristic

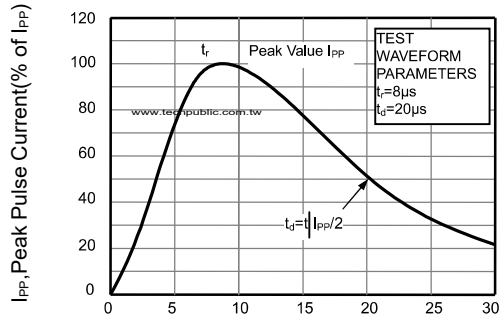


Figure 1: 8/20 μs Pulse Waveform

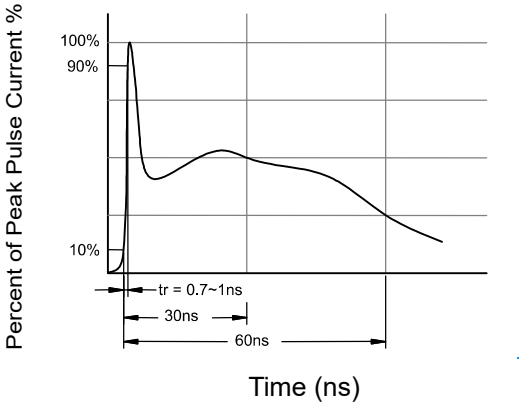


Figure 2: ESD Pulse Waveform
(according to IEC 61000-4-2)

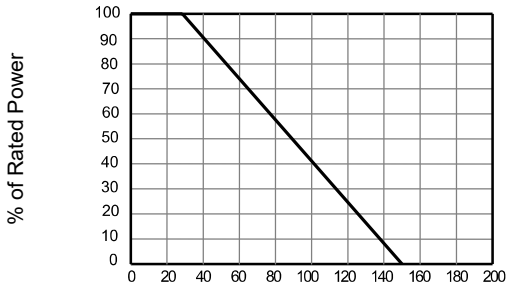
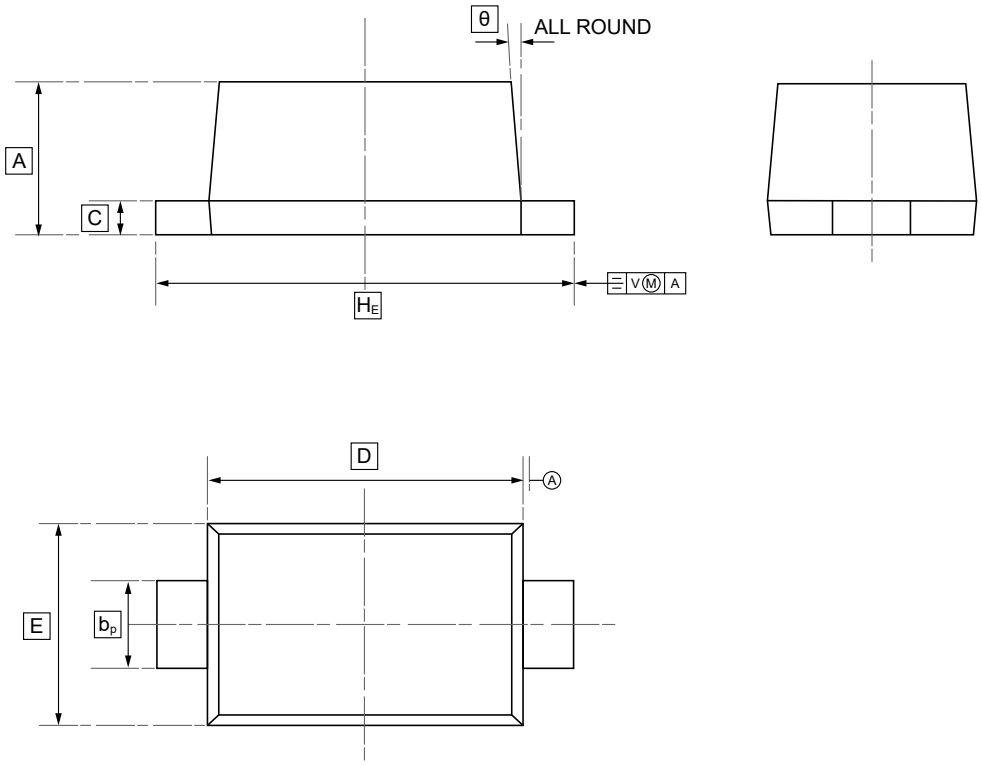


Figure 3: Power Derating Curve

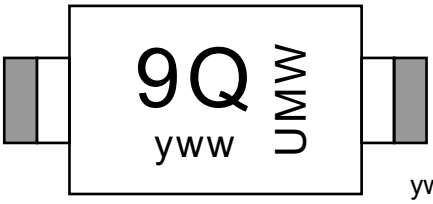
7.SOD-523 Package Outline Dimensions



DIMENSIONS (mm are the original dimensions)

Symbol	A	b_p	C	D	E	H_E	θ
Min	0.58	0.3	0.100	1.15	0.75	1.5	5°
Max	0.68	0.4	0.135	1.25	0.85	1.7	

8.Ordering information



yww: Batch Code

Order Code	Package	Base QTY	Delivery Mode
UMW ESD5491S	SOD-523	3000	Tape and reel

9.Disclaimer

UMW reserves the right to make changes to all products, specifications. Customers should obtain the latest version of product documentation and verify the completeness and currency of the information before placing an order.

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