UMW PESD5V0U1UB

1.Features

- Protects one data or power line
- Operating voltage : 5V
- Ultra low clamping voltage
- Complies with following standards :
- -IEC 61000-4-2 (ESD) immunity test

  Air discharge : ±23KV

  Contact discharge : ±20k V

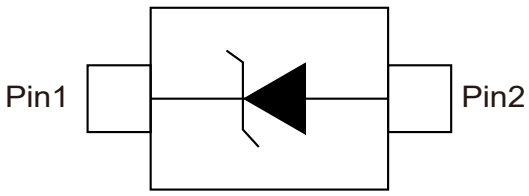
2.Applications

- Mobile Phones and Accessories
- Battery Protection
- USB VBUS
- Power Line Protection
- Hand Held Portable Applications

3.Mechanical Characteristics

- Ultra low leakage : NA level
- Case Material : Green Molding Compound

4.Pinning information



SOD-523

5.Absolute Maximum Ratings T_A= 25°C

Parameter	Symbol	Value	Units
ESD per IEC 61000-4-2 (Air)	V_{ESD}	±23	kV
ESD per IEC 61000-4-2 (Contact)		±20	kV
Junction Temperature Range	T_J	-55 to 125	°C
Storage Temperature Range	T_{STG}	-55 to 150	°C

6.Electrical Characteristic (T_A=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Working Voltage	V_{RWM}				5	V
Breakdown Voltage	V_{BR}	I_T=1mA (Pin1-Pin2)	5.6		9	V
Reverse Leakage Current	I_R	V_{RWM}=5V (Pin2-Pin1)			0.08	μA
Clamping Voltage	V_C	I_{PP}=1A(8x20μs pulse) (Pin1-Pin2)			9	V
Clamping Voltage	V_C	I_{PP}=4A(8x20μs pulse) (Pin1-Pin2)			15	V
Junction Capacitance	C_J	V_R=0V, f=1MHz (Pin1-Pin2)		0.6	0.9	pF

7.Typical characteristic

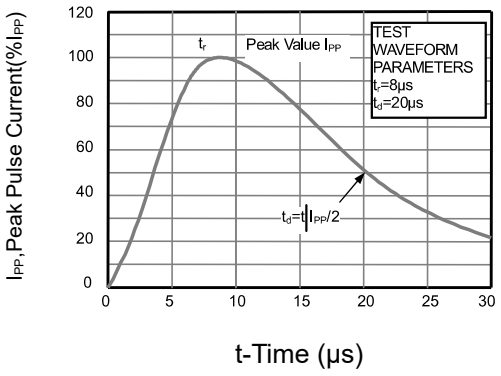


Figure 1: 8/20μs Pulse Waveform

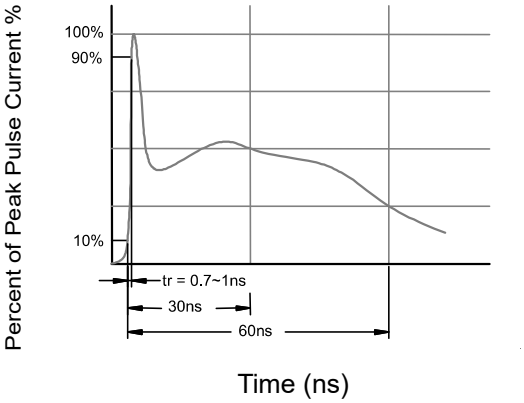


Figure 2: ESD Pulse Waveform
(according to IEC 61000-4-2)

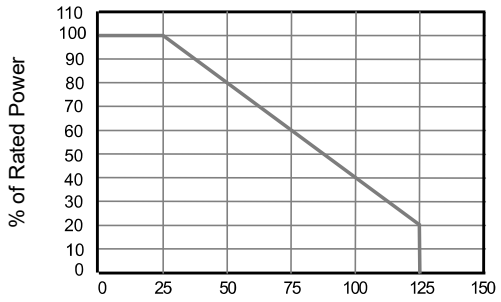
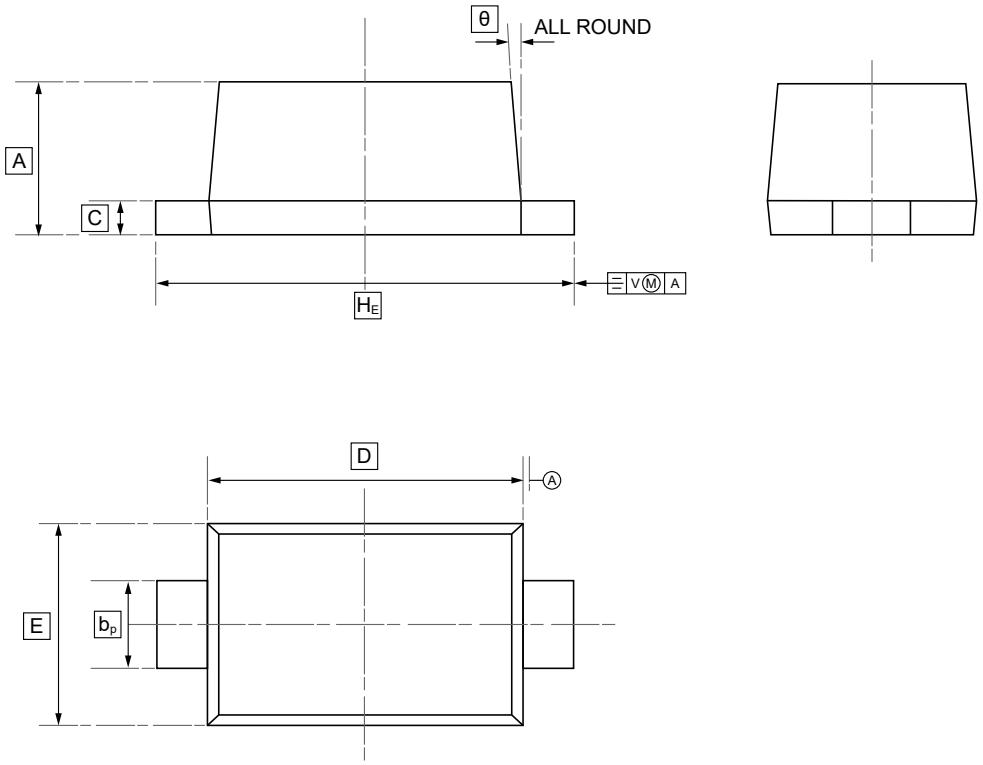


Figure 3: Power Derating Curve

8.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	

9.Ordering information

ww: Batch Code

Order Code	Package	Base QTY	Delivery Mode
UMW PESD5V0U1UB	SOD-523	3000	Tape and reel

10.Disclaimer

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