UMW PJSD05CTS

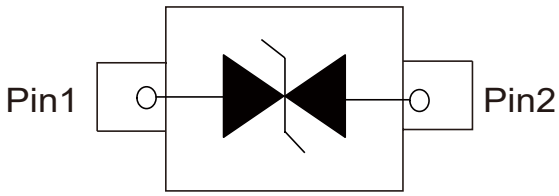
1.Features

- Complies with following standards:
  IEC 61000 -4-2 (ESD) immunity test
  Air discharge: ±30kV
  Contact discharge: ±30kV
  IEC61000 -4-4 (EFT) 40A (5/50ns)
  IEC61000 -4-5 (Lightning) 8A (8/20 μs)
- Ultra low leakage: nA level
- Operating voltage: 5V
- Low clamping voltage
- RoHS Compliant

2.Applications

- USB 2.0 power and data line
- Set-top box and digital TV
- Digital video interface (DVI)
- Notebook Computers
- SIM Ports
- 10/100 Ethernet

3.Pinning information



SOD-523

4.Absolute Maximum Ratings T_{amb}= 25°C

Parameter	Symbol	Value	Units
Peak Pulse Power (8/20μs)	P_{PP}	100	W
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 Range	T_{STJ}	-55 to 150	°C

5.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	5.5			V
Reverse Leakage Current	I_R	V_{RWM}=5V			1	μA
Clamping Voltage	V_C	I_{PP}=1A(8 x 20μs pulse)			9	V
Clamping Voltage	V_C	I_{PP}=8A(8 x 20μs pulse)			12	V
Junction Capacitance	C_J	V_R=0V, f=1MHz		15		pF

6.Typical characteristic

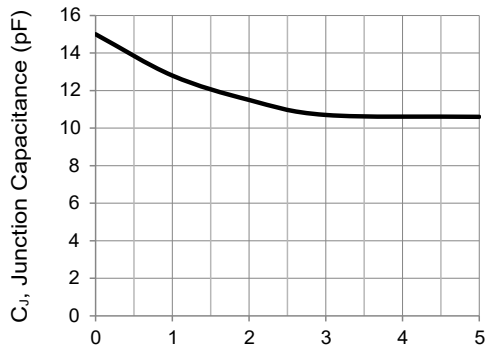


Figure 1: Junction Capacitance vs. Reverse Voltage

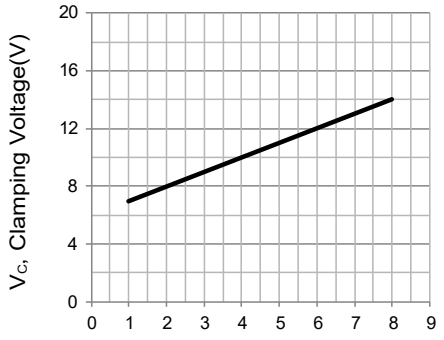


Figure 2: Clamping Voltage vs. Peak Pulse Current

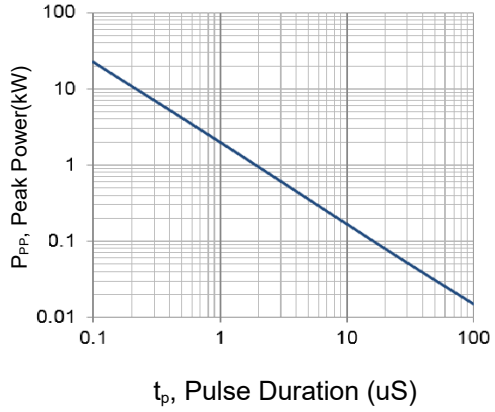


Figure 3: Peak Pulse Power vs. Pulse Time

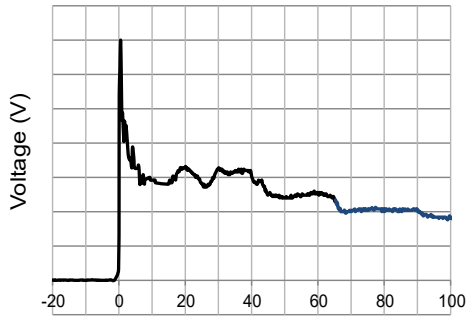


Figure 4: IEC61000−4−2 Pulse Waveform

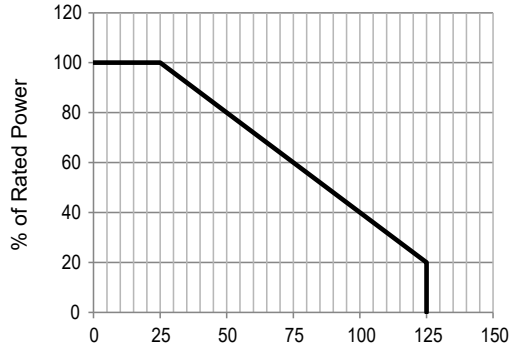


Figure 5: Power Derating Curve

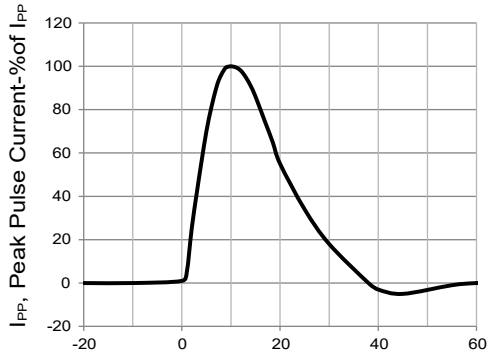
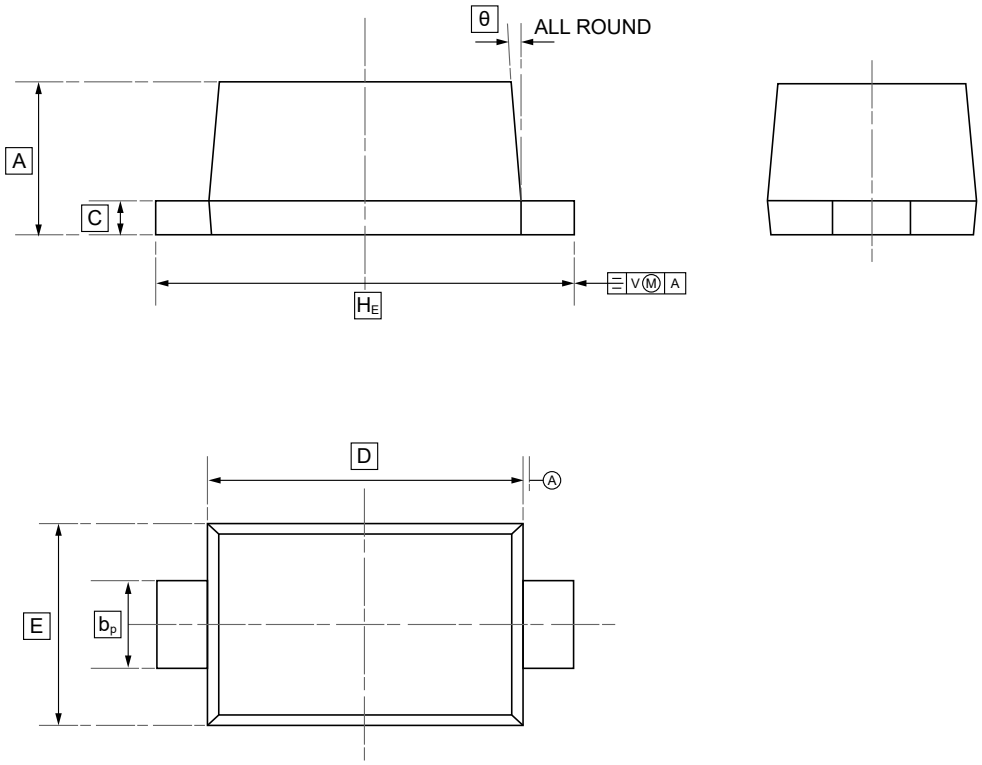


Figure 6: 8 X 20us Pulse Waveform

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 PJSD05CTS	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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