UMW D1213A-01WS

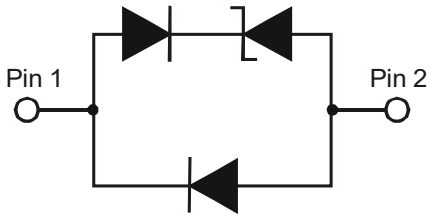
1.Features

- IEC 61000-4-2 (ESD): Air ±15kV, Contact ±8kV
- 1 Channel of ESD protection
- Low Channel Input Capacitance of 0.85pF Typical
- Typically Used at High Speed Ports such as USB 2.0,
- IEEE1394, Serial ATA, DVI, HDMI, PCI

2.Mechanical Data

- Case: SOD323
- Case Material: Molded Plastic
  "Green" Molding Compound

3.Pinning information



SOD-323

4.Maximum Ratings

Parameter	Symbol	Conditions	Value	Units
Peak Pulse Current	I_{PP}	8/20μs, Per Figure 3	5	°C/W
ESD Protection – Contact Discharge	$V_{ESD_Contact}$	Standard IEC 61000-4-2	±8	°C/W
ESD Protection – Air Discharge	V_{ESD_Air}	Standard IEC 61000-4-2	±15	°C/W

5.Thermal Characteristics

Parameter	Symbol	Value	Units
Package Power Dissipation (Note 5)	P_D	250	mW
Thermal Resistance, Junction to Ambient (Note 5)	$R_{\theta JA}$	500	°C/W
Storage Temperature Range	T_J, T_{STG}	-65 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}				3.3	V
Reverse current (Note 6)	I_R	V_R=V_{RWM}=3.3V		0.1	1	μA
Reverse breakdown voltage	V_{BR}	I_R=1mA	6			V
Forward voltage	V_F	I_F=8mA	0.6	0.8	0.95	V
Reverse clamping voltage, Positive Transients	V_{CL1}	I_{PP}=1A, t_p=8/20μs		10		V
Reverse clamping voltage, Negative Transients	V_{CL2}	I_{PP}=-1A, t_p=8/20μs		-1.7		V
Dynamic resistance	R_{DYN}	I_R=1A, t_p=8/20μs		0.9		Ω
Capacitance	C_T	V_R=1.65V, f=1MHz		0.85	1.2	pF

7.Typical characteristic

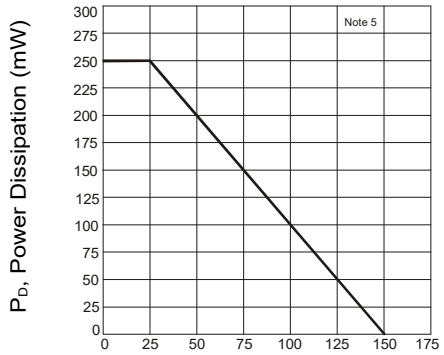


Figure 1: Power Derating Curve

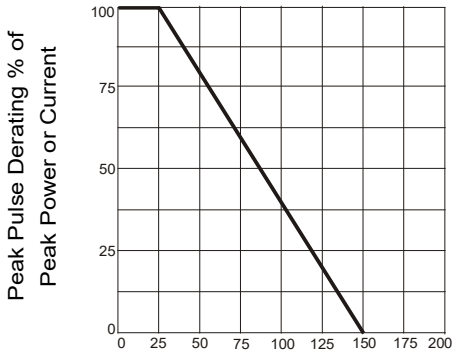


Figure 2: Pulse Derating Curve

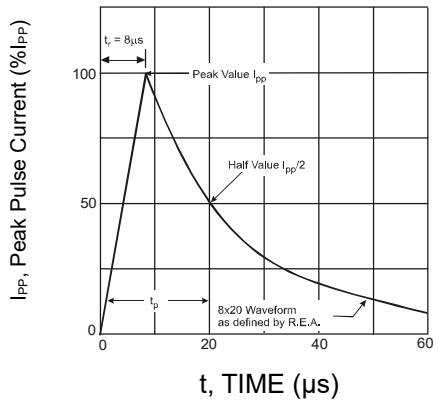


Figure 3: Pulse Waveform

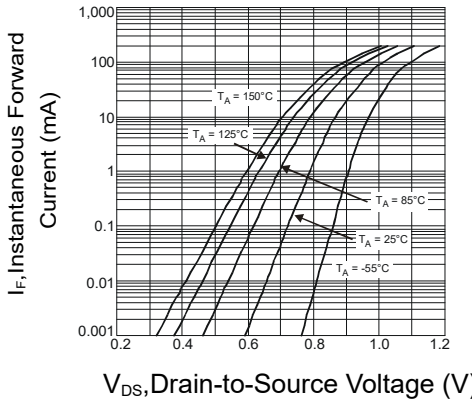


Figure 4: Capacitance

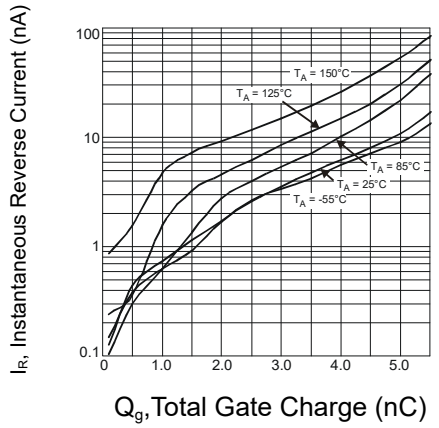


Figure 5: Gate Charge

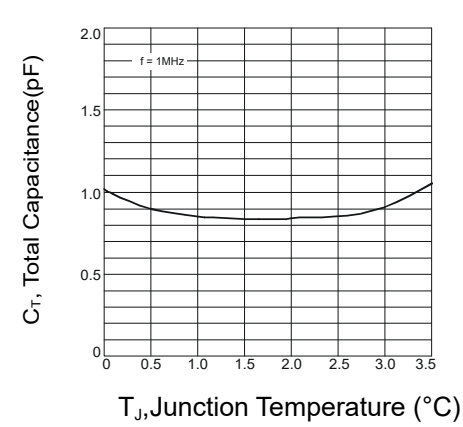
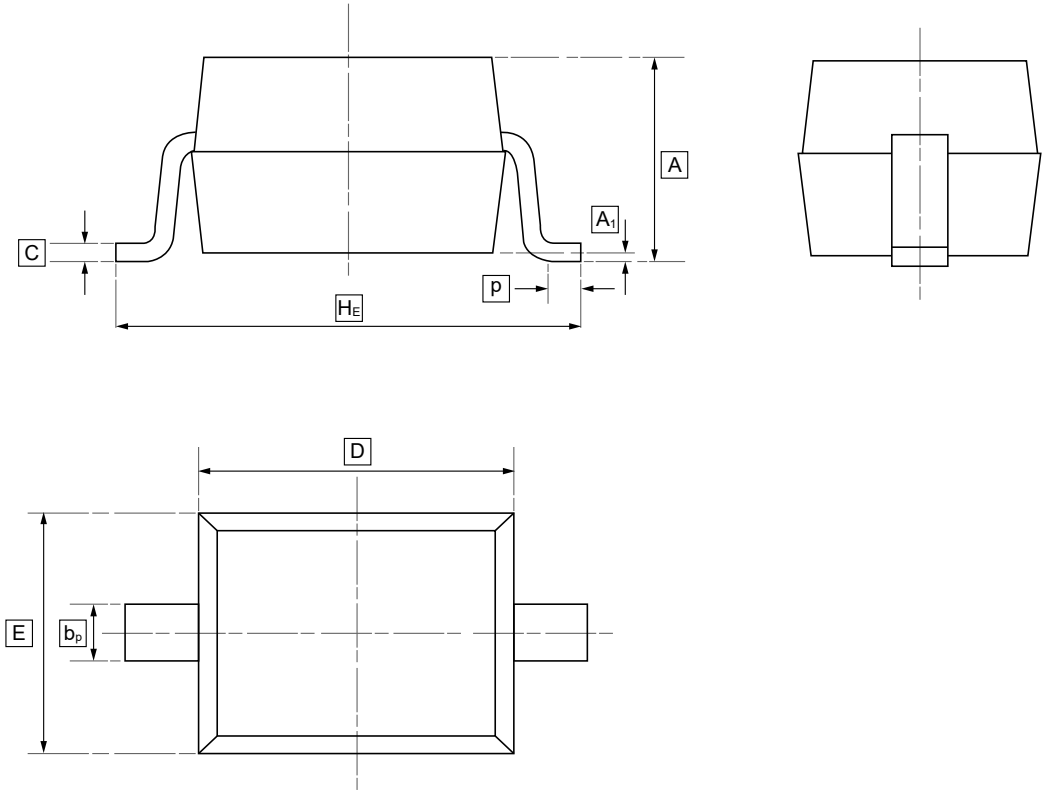


Figure 6: On-Resistance vs. Junction Temperature

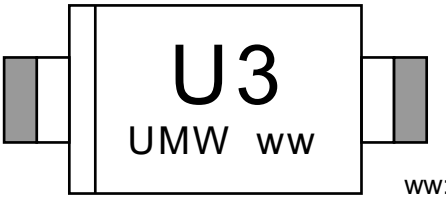
8.SOD-323 Package Outline Dimensions



DIMENSIONS (mm are the original dimensions)

Symbol	A	b_p	C	D	E	H_E	A_1	p
Min	0.80	0.25	0.10	1.50	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

9.Ordering information



ww: Batch Code

Order Code	Package	Base QTY	Delivery Mode
UMW D1213A-01WS	SOD-323	3000	Tape and reel

10.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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