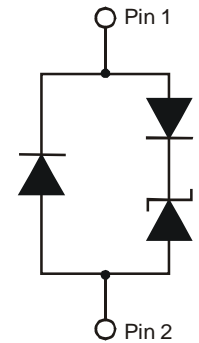


Features

- 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



Device Schematic

Mechanical Data

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

Maximum Ratings (@T_A = +25°C, unless otherwise specified.)

Characteristic	Symbol	Value	Unit	Conditions
Peak Pulse Current	I _{PP}	5	A	8/20µs, Per Figure 3
ESD Protection – Contact Discharge	V _{ESD_Contact}	±8	kV	Standard IEC 61000-4-2
ESD Protection – Air Discharge	V _{ESD_Air}	±15	kV	Standard IEC 61000-4-2

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Package Power Dissipation (Note 5)	P _D	250	mW
Thermal Resistance, Junction to Ambient (Note 5)	R _{θJA}	500	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°C

Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Reverse working voltage	V _{RWM}	—	—	3.3	V	—
Reverse current (Note 6)	I _R	—	0.1	1.0	μA	V _R = V _{RWM} = 3.3V
Reverse breakdown voltage	V _{BR}	6.0	—	—	V	I _R = 1mA
Forward voltage	V _F	0.6	0.8	0.95	V	I _F = 8mA
Reverse clamping voltage, Positive Transients	V _{CL1}	—	10.0	—	V	I _{PP} = 1A, t _p = 8/20μs
Reverse clamping voltage, Negative Transients	V _{CL2}	—	-1.7	—	V	I _{PP} = -1A, t _p = 8/20μs
Dynamic resistance	R _{DYN}	—	0.9	—	Ω	I _R = 1A, t _p = 8/20μs
Capacitance	C _T	—	0.85	1.2	pF	V _R = 1.65V, f = 1MHz

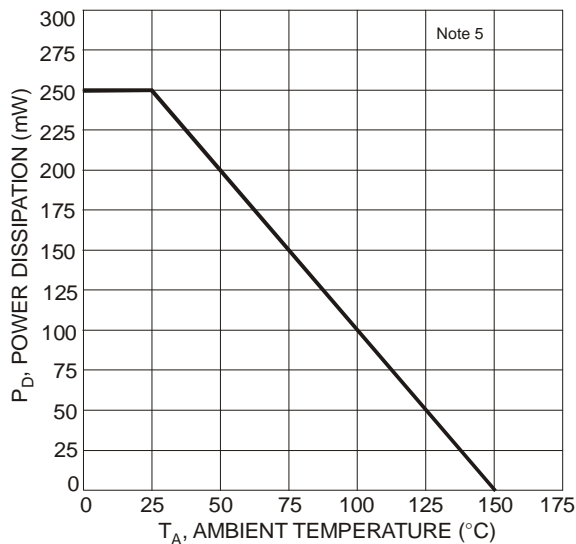


Figure 1 Power Derating Curve

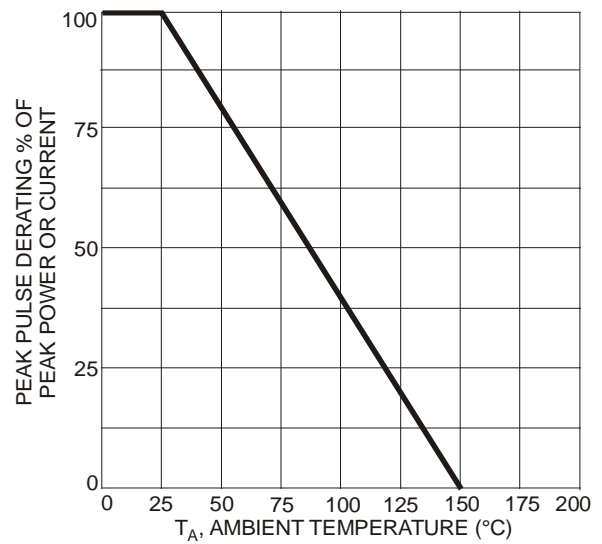
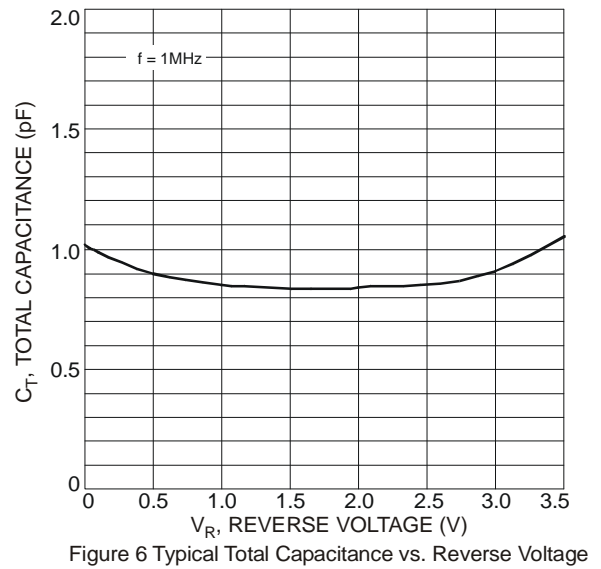
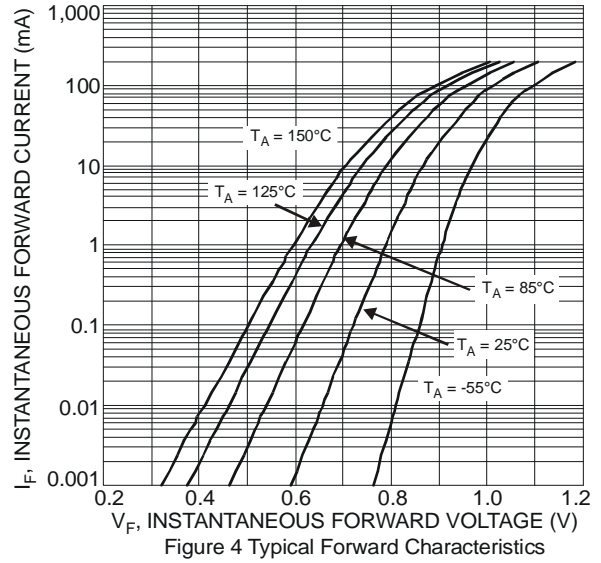
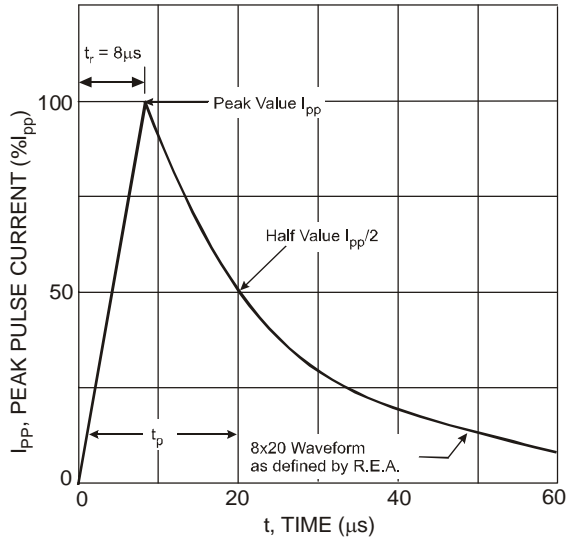
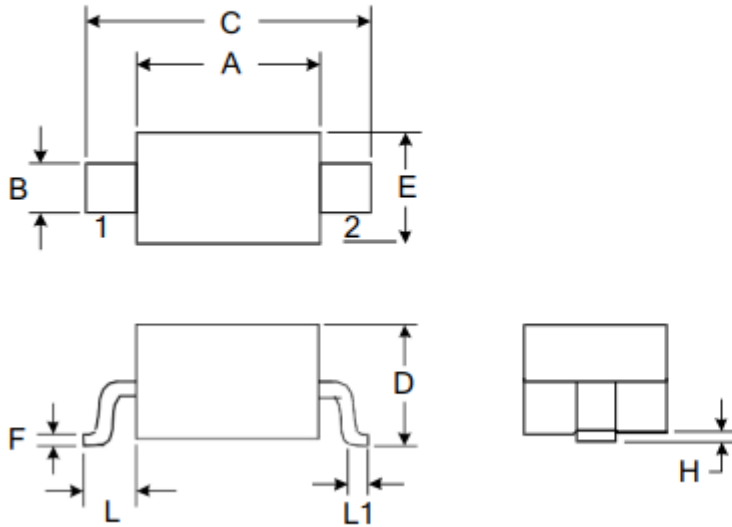


Figure 2 Pulse Derating Curve

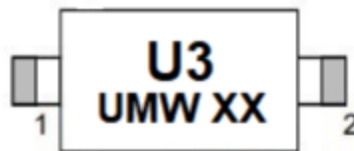


Outline Drawing – SOD323



DIMENSIONS				
SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	1.600	1.800	0.063	0.071
B	0.250	0.350	0.010	0.014
C	2.500	2.700	0.098	0.106
D		1.000		0.039
E	1.200	1.400	0.047	0.055
F	0.080	0.150	0.003	0.006
L	0.475 REF		0.019REF	
L1	0.250	0.400	0.010	0.016
H	0.000	0.100	0.000	0.004

Marking



- In the Second line, the word "XX" stands for period

Ordering information

Order code	Package	Base qty	Delivery mode
UMW D1213A-01WS	SOD-323	3000	Tape and reel