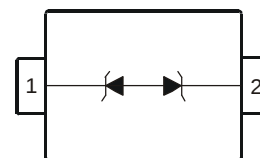


Features

- Provides ESD Protection per IEC 61000-4-2 Standard: Air – $\pm 30\text{kV}$, Contact – $\pm 30\text{kV}$
- 1 Channel of ESD Protection
- Low Channel Input Capacitance
- Typically Used in Cellular Handsets, Portable Electronics, Communication Systems, Computers and Peripherals



Device Schematic

Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

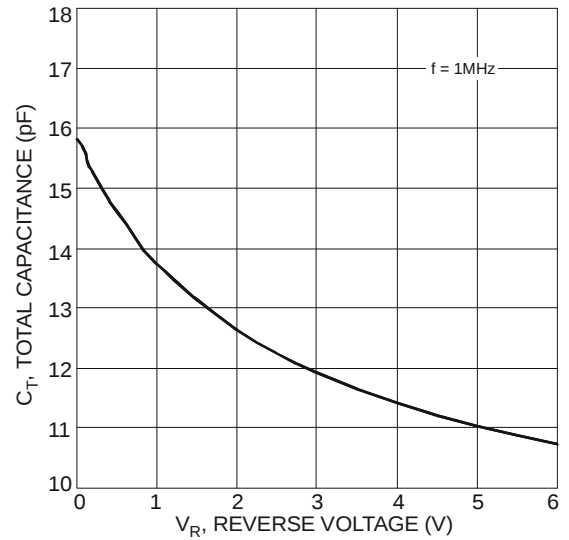
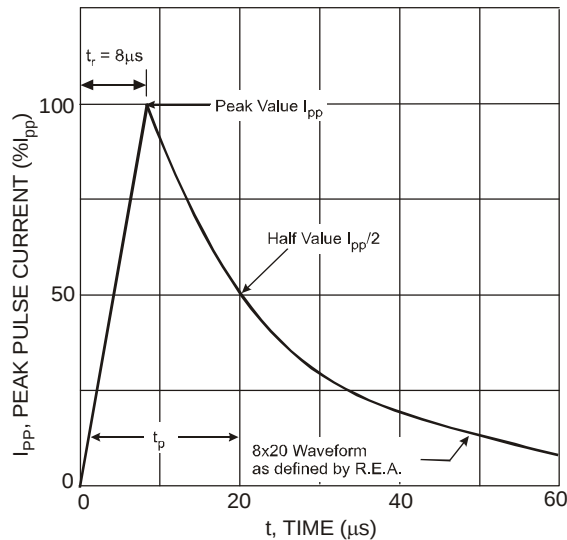
Characteristic	Symbol	Value	Unit	Conditions
Peak Pulse Power Dissipation	P_{PP}	84	W	8/20 μs , Per Fig. 1
Peak Pulse Current	I_{PP}	6	A	8/20 μs , Per Fig. 1
ESD Protection – Contact Discharge	$V_{ESD_Contact}$	± 30	kV	Standard IEC 61000-4-2
ESD Protection – Air Discharge	V_{ESD_Air}	± 30	kV	Standard IEC 61000-4-2

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Package Power Dissipation	P_D	200	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	625	$^{\circ}\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150	$^{\circ}\text{C}$

Electrical Characteristics @ $T_A = 25^{\circ}\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Reverse Standoff Voltage	V_{RWM}			5	V	
Channel Leakage Current	I_{RM}		10	100	nA	$V_{RWM} = 5\text{V}$
Clamping Voltage, Positive Transients	V_{CL}		7.0 8.7 10.5 11.5	9.0 10.7 12.0 14.0	V	$I_{PP} = 1\text{A}, t_p = 8/20\mu\text{S}$ $I_{PP} = 3\text{A}, t_p = 8/20\mu\text{S}$ $I_{PP} = 5\text{A}, t_p = 8/20\mu\text{S}$ $I_{PP} = 6\text{A}, t_p = 8/20\mu\text{S}$
Breakdown Voltage	V_{BR}	6	7	8	V	$I_R = 1\text{mA}$
Differential Resistance	R_{DIF}		0.2		Ω	$I_R = 1\text{A}, t_p = 8/20\mu\text{S}$
Channel Input Capacitance	C_T		15	20	pF	$V_R = 0\text{V}, f = 1\text{MHz}$



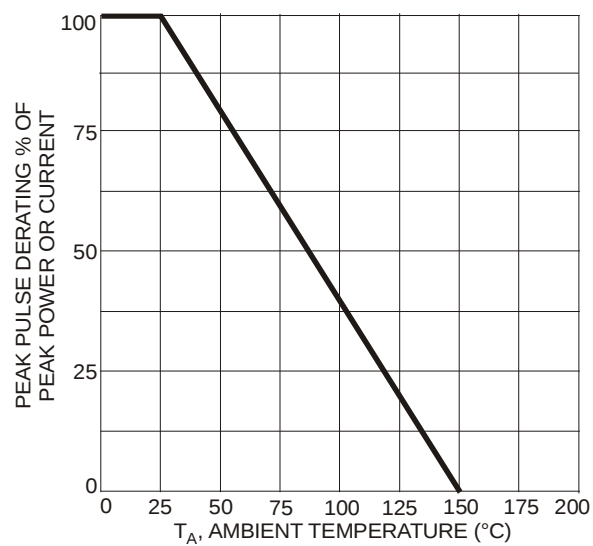


Fig. 3 Pulse Derating Curve

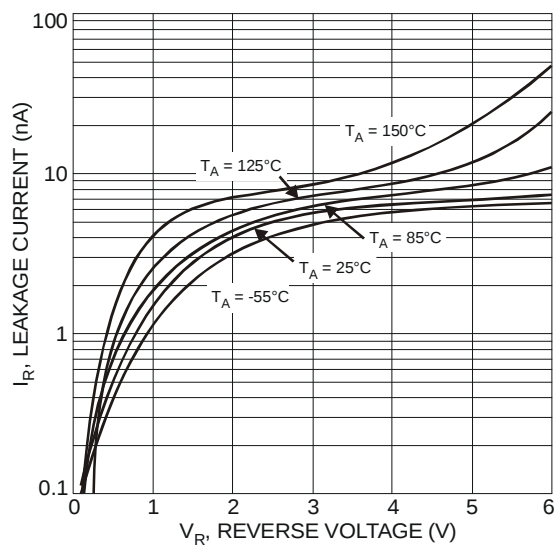
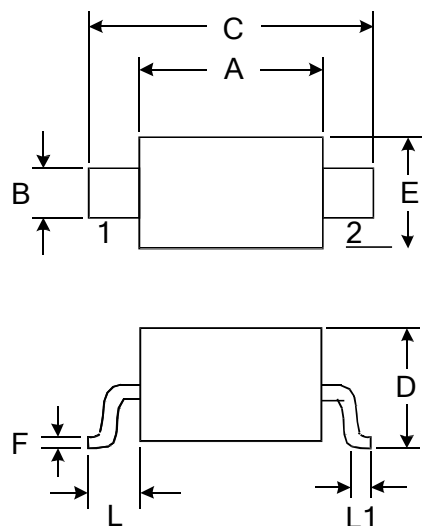


Fig. 4 Typical Reverse Characteristics

Outline Drawing – SOD-323



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



Ordering information

Order code	Package	Baseqty	Deliverymode
UMW D5V0L1B2WS-7	SOD-323	3000	Tape and reel