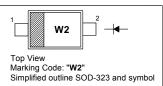
## SURFACE MOUNT FAST SWITCHING DIODE

#### **Features**

- · Fast switching speed
- Ultra-small surface mount package
- For general purpose switching applications
- · High conductance

#### PINNING

F	PIN	DESCRIPTION	
	1	Cathode	
	2	Anode	



### Absolute Maximum Ratings (T<sub>a</sub> = 25 °C)

Parameter	Symbol	Value	Unit	
Peak Reverse Voltage	$V_{RM}$	100	V	
Reverse Voltage	$V_R$	75	V	
Average Rectified Output Current	Io	150	mA	
Forward Continuous Current	I <sub>FM</sub>	300	mA	
Non-repetitive Peak Forward Surge Current	at t = 1 µs at t = 1 s	I <sub>FSM</sub>	2 1	А
Power Dissipation		P <sub>tot</sub>	200	mW
Thermal Resistance, Junction to Ambient		$R_{ heta JA}$	625	°C/W
Operating and Storage Temperature Range		$T_{j},T_{stg}$	- 65 to + 150	°C

# Characteristics at T<sub>a</sub> = 25 °C

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 1 \mu A$	$V_{(BR)R}$	75	-	V
Peak Reverse Current at $V_R$ = 20 V at $V_R$ = 75 V at $V_R$ = 25 V, $T_j$ = 150 °C at $V_R$ = 75 V, $T_j$ = 150 °C	I <sub>R</sub>		25 1 30 50	nΑ μΑ μΑ μΑ
Forward Voltage at $I_F = 1$ mA at $I_F = 10$ mA at $I_F = 50$ mA at $I_F = 150$ mA	V <sub>F</sub>		0.715 0.855 1 1.25	٧
Total Capacitance at $V_R = 0 \text{ V}$ , $f = 1 \text{ MHz}$	Ст	-	2	pF
Reverse Recovery Time at $I_F = I_R = 10$ mA, $I_{RR} = 0.1$ X $I_R$ , $R_L = 100$ $\Omega$	t <sub>rr</sub>	-	4	ns



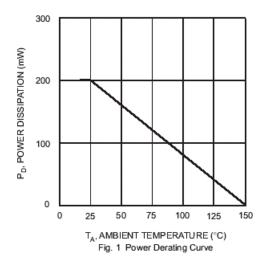


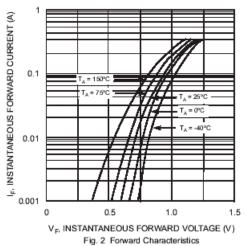


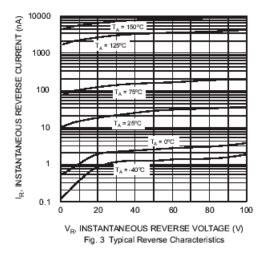


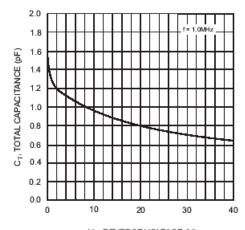












V<sub>R</sub>, REVERSE VOLTAGE (V) Fig. 4 Typical Capacitance vs. Reverse Voltage



# SEMTECH ELECTRONICS LTD.











### **PACKAGE OUTLINE**

Plastic surface mounted package; 2 leads

**SOD-323** 

