

## 200mW SOD-323 Fast Switching Diode

### Features

- Fast Switching Device
- 200mW; Power Dissipation of 200mW
- High Stability and High Reliability
- Low reverse leakage

### Mechanical Data

- SOD-323 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



**RoHS**  
COMPLIANT



**Marking:5D SOD-323**

### Maximum Ratings & Thermal Characteristics (T<sub>A</sub> =25°C unless otherwise noted)

Parameters	Symbol	Value	Unit
Reverse Voltage	V <sub>R</sub>	100	V
Power Dissipation	P <sub>D</sub>	200	mW
Operating junction temperature	T <sub>J</sub>	150	°C
Storage temperature range	T <sub>S</sub>	-50+150	°C
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	635	/W
Non-repetitive Peak Forward Current	I <sub>FM</sub>	500	mA
Peak Forward Surge Current @tp=1us; TA=25	I <sub>FSM</sub>	2.0	A

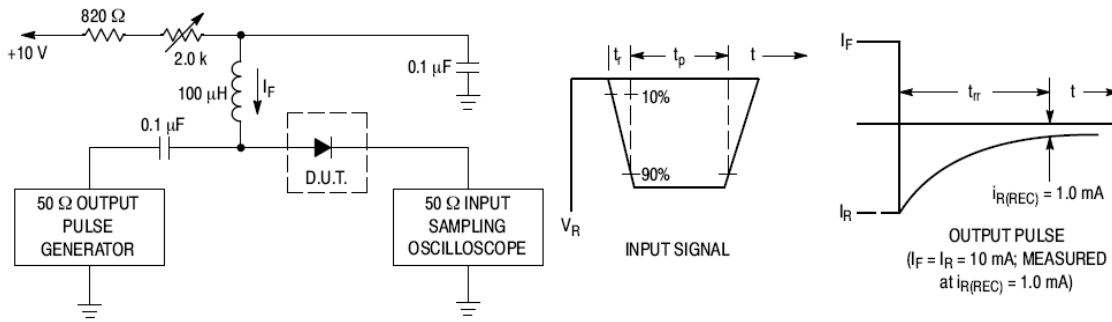
Valid provided that electrodes are kept at ambient temperature.

### Electrical Characteristics (T<sub>A</sub> =25°C unless otherwise noted)

Parameter	Symbols	Test Condition	Limits		Unit
			Min	Max	
Reverse Voltage	V <sub>(BR)</sub>	I <sub>R</sub> =100uA	100		V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =20V		25	nA
		V <sub>R</sub> =75V		5	uA
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =10mA		1.00	V
Reverse Recovery Time	T <sub>RR</sub>	I <sub>F</sub> = I <sub>R</sub> = 10mA, I <sub>rr</sub> =0.1X I <sub>R</sub> R <sub>L</sub> =100Ω		4	nS
Capacitance	C <sub>j</sub>	V <sub>R</sub> =0V, f=1MHZ		4	pF

## Ratings and Characteristics Curves

( $T_A = 25^\circ\text{C}$  unless otherwise noted)



- Notes: 1. A 2.0 k $\Omega$  variable resistor adjusted for a Forward Current ( $I_F$ ) of 10 mA.  
 2. Input pulse is adjusted so  $I_{R(\text{peak})}$  is equal to 10 mA.  
 3.  $t_p \gg t_{rr}$

Figure 1. Recovery Time Equivalent Test Circuit

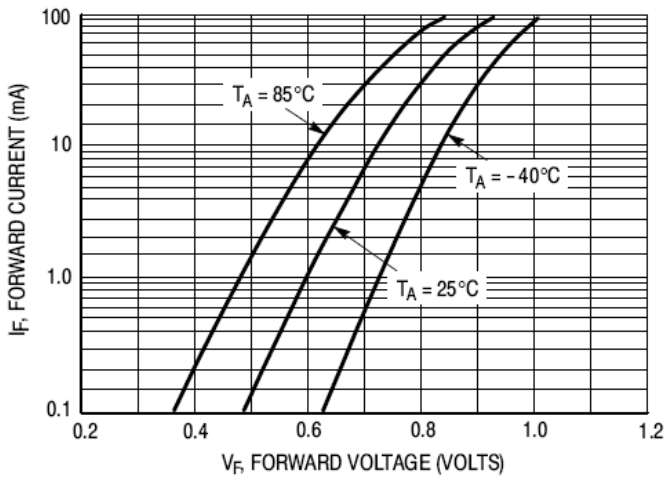


Figure 2. Forward Voltage

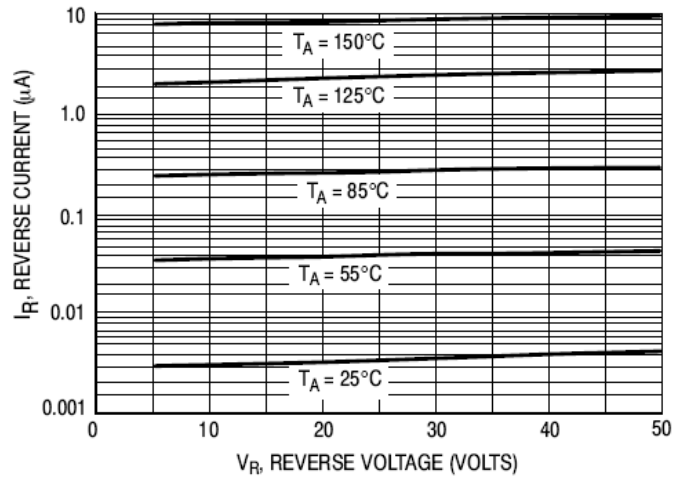


Figure 3. Leakage Current

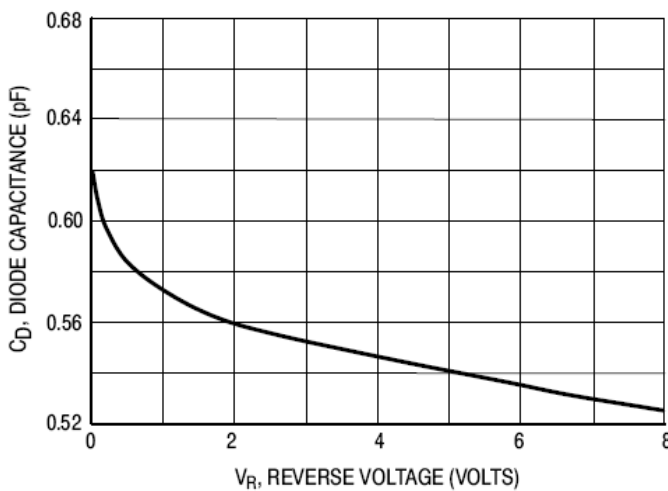
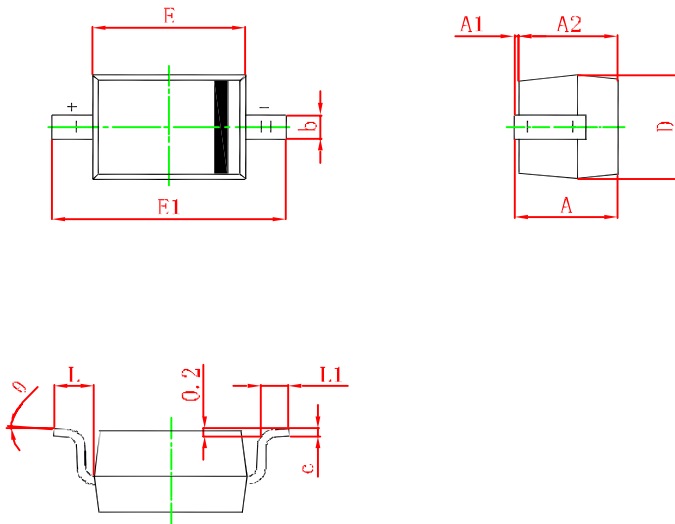


Figure 4. Capacitance

## Package Outline Dimensions

millimeters



Symbol	Min	Max
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0°	8°

## Revision History

Document Version	Date of release	Description of changes
Rev.A	2016.06.29	First issue

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