

## Features

- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Low Capacitance
- Low Forward Resistance
- Halogen Free. "Green" Device (Note 1)

## Maximum Ratings

- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Thermal Resistance: 120°C/W Junction to Soldering Point

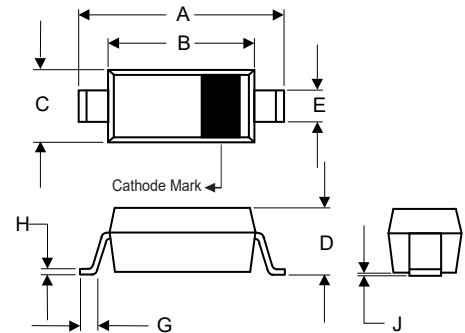
Parameter	Symbol	Limits	Unit
Reverse Voltage	$V_R$	50	V
Forward Current	$I_F$	100	mA
Power Dissipation ( $T_S=90^\circ\text{C}$ )	$P_D$	500	mW

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

**Device Marking: A1**

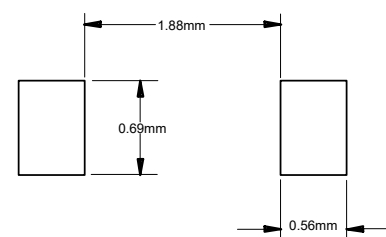
# Silicon RF Switching Diode

## SOD-323



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.090	0.107	2.30	2.70	
B	0.063	0.071	1.60	1.80	
C	0.045	0.053	1.15	1.35	
D	0.031	0.045	0.80	1.15	
E	0.010	0.016	0.25	0.40	
G	0.004	0.018	0.10	0.45	
H	0.004	0.010	0.10	0.25	
J	----	0.006	----	0.15	

### SUGGESTED SOLDER PAD LAYOUT



**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Parameter	Symbol	Min.	Max.	Max.	Conditions
Forward Voltage	$V_F$			1.0V	$I_F=10\text{mA}$
Reverse Current	$I_{R1}$			20nA	$V_R=20\text{V}$
	$I_{R2}$			100nA	$V_R=50\text{V}$
Diode Capacitance	$C_{d1}$		1.8pF	2.0pF	$V_R=0\text{V}, f=1\text{MHz}$
	$C_{d2}$		1.1pF	1.5pF	$V_R=1\text{V}, f=1\text{MHz}$
	$C_{d3}$		0.8pF	1.0pF	$V_R=3\text{V}, f=1\text{MHz}$
Diode Forward Resistance	$R_{D1}$		0.45Ω	0.7Ω	$I_F=3\text{mA}, f=100\text{MHz}$
	$R_{D2}$		0.36Ω	0.5Ω	$I_F=10\text{mA}, f=100\text{MHz}$
Reverse Resistance	1/gp		100KΩ		$V_R=1\text{V}, f=100\text{MHz}$
Series Inductance	$L_S$		2nH		

## Curve Characteristics

Fig. 1 - Capacitance Characteristics

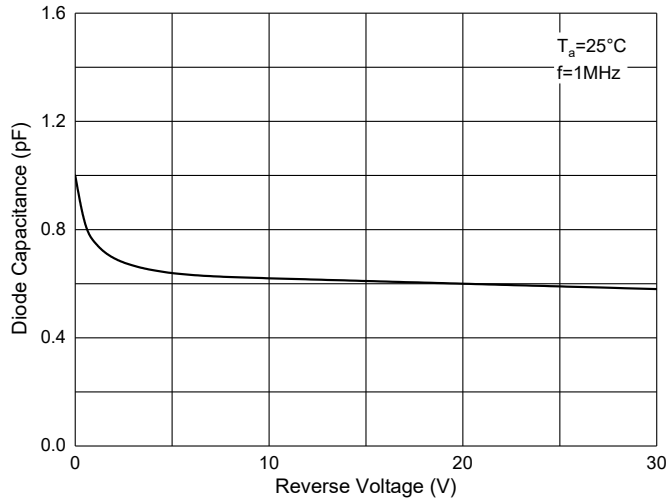
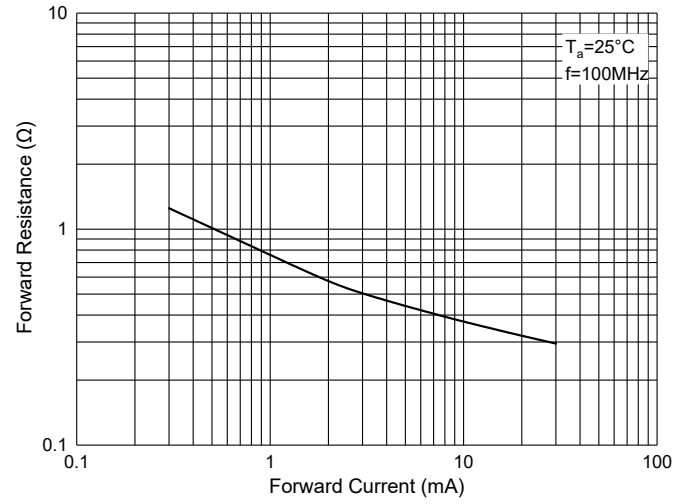


Fig. 2 - Forward Resistance Characteristics



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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