



#### **Features**

- These diodes feature very low turn-on voltage and fast switching.
- These devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges.
- For linear amplification .
- Available in lead free version.

#### **Mechanical Data**

- Case:Molded Plastic,SOD-323 .
- Epoxy:UL 94V-0 rate flame retardant
- Terminals:Plated Leads Solderable per
- MIL-STD-750, Method-2026.
- Marking: S1.
- Mounting Position : Any.

## **Maximum Ratings**

Deting at 25 °C ambient temperature uplace otherwise encoified

		<u>SOD-323</u>	
0.008 (0.2)	0.020 0.008 0.11 (2.8) 0.09 (2.3)	(60) \$200 (0.5) 200 (0.5)	0.016 (0.4)
0.059 (1,5)	0.075 (1.9) 0.059 (1.5)		

Dimensions in inches and (millimeters)

Rating at 25 C ambient temperature unless otherwise specified.						
Characteristic	Symbol	Value	Unit			
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	30	V			
Forward Continuous Current	l <sub>F</sub>	200	mA			
Repetitive Peak Forward Current	I <sub>FRM</sub>	300	mA			
Peak Forward Surge Current@ t <sub>P</sub> = 10ms	I <sub>FSM</sub>	600	mA			
Power Dissipation	PD	200	mW			
Thermal Resistance Junction to Ambient Air	R <sub>0JA</sub>	500	°C/W			
Operating Temperature Range,	Tj	125	°C			
Storage Temperature Range	T <sub>STG</sub>	-65 ~ 150	°C			
Power Dissipation Thermal Resistance Junction to Ambient Air Operating Temperature Range, Storage Temperature Range	P <sub>D</sub> R <sub>0JA</sub> T <sub>j</sub> T <sub>STG</sub>	200 500 125 -65 ~ 150	mW ℃/W ℃ ℃			

## **Electrical Characteristics**

Rating at 25°C ambient temperature unless otherwise specified.

Characteristic	Symbol	Conditions	Min	Max	Unit				
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>R</sub> =100μΑ	30		V				
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =25V		2	uA				
	V <sub>F1</sub>	I <sub>F</sub> =0.1mA		0.24	V				
	V <sub>F2</sub>	I <sub>F</sub> =1mA		0.32	V				
Forward voltage	V <sub>F3</sub>	I <sub>F</sub> =10mA		0.40	V				
	V <sub>F4</sub>	I <sub>F</sub> =30mA		0.50	V				
	V <sub>F5</sub>	I⊧=100mA		0.80	V				
Diode Capacitance	CD	V <sub>R</sub> =1V,f=1MHz		10	pF				
	Trr	IF=IR=10mA		6	nS				
Reverse Recovery Tille		VR=6V,RL=100Ω		υ					



## Electrical Characteristics Ta = 25°C unless otherwise specified













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