

**SMALL SIGNAL DIODE**  
**VOLTAGE RANGE 30 Volts**

**FEATURES**

- \* Fast Switching Speed
- \* Low turn-on voltage

**MECHANICAL DATA**

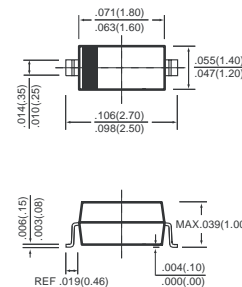
- \* Case: Molded plastic
- \* Epoxy: UL 94V-O rate flame retardant
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 0.004 grams

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.



**SOD-323**



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	SD106WS	UNITS
Reverse Breakdown Voltage @ $I_R=100\mu\text{A}$	$V_{(BR)R}$	30	Volts
Maximum Working Peak reverse Voltage	$V_{RM}$	30	Volts
Maximum Forward Continuous Current	$I_{FM}$	200	mAmps
Non-Repetitive Peak Forward Surge Current @ $t_p=10\text{mS}$	$I_{FSM}$	1	Amps
Maximum Power Dissipation ( $T_C = 25^\circ\text{C}$ )	PD	250	mW
Thermal Resistance junction to ambient air	$T_{\theta JA}$	500	$^\circ\text{C}/\text{W}$
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 noted )

CHARACTERISTICS	SYMBOL	MIN.	TYP.	MAX.	UNITS
Reverse voltage leakage current ( $V_R=25\text{V}$ )	$I_R$	-	-	5	$\mu\text{A}$
Forward voltage Pulse Test $t_p < 300\mu\text{s}, \delta < 2\%$	$V_F$	-	( $I_F=2\text{mA}$ )	260	mV
			( $I_F=15\text{mA}$ )	320	
			( $I_F=100\text{mA}$ )	420	
			( $I_F=200\text{mA}$ )	490	
Diode capacitance ( $V_R=10\text{V}, f=1\text{MHz}$ )	$C_T$	-	-	10	pF

## RATING AND CHARACTERISTICS CURVES ( SD106WS )

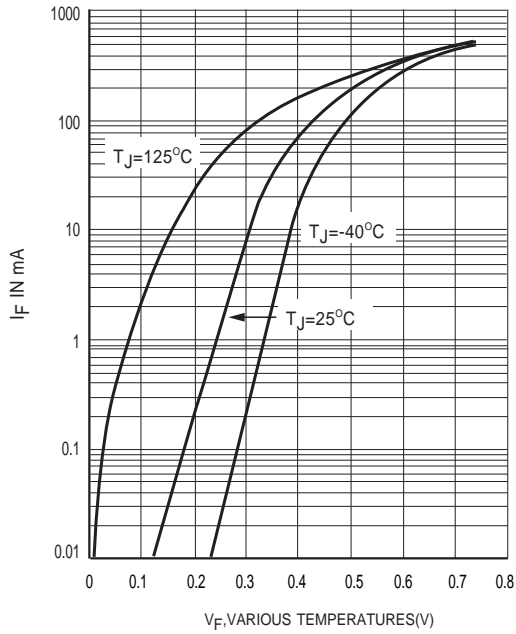


Figure1 Forward Voltage Forward Current

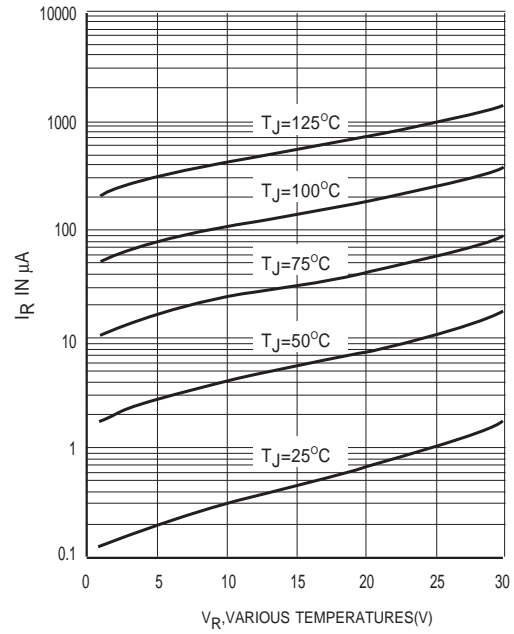


Figure2 Typical Variation of Reverse Current

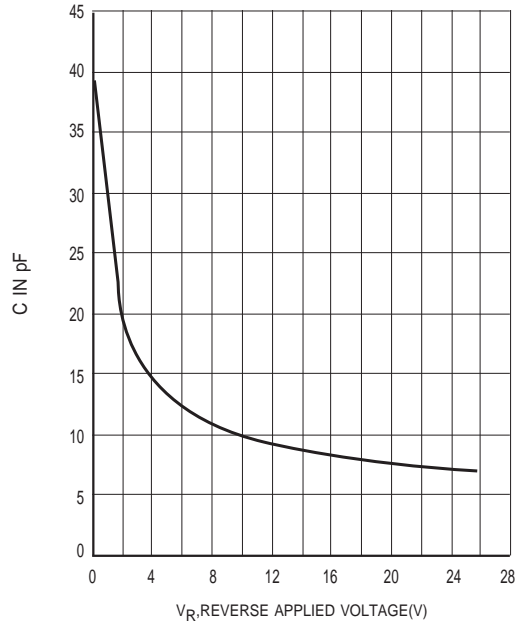


Figure3 Typical Capacitance °C

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