

**SCHOTTKY DIODES**

**FEATURES**

- \* Low Forward Voltage Drop
- \* Guard Ring Construction for Transient Protection
- \* Negligible Reverse Recovery Time
- \* Low Reverse Capacitance

**MECHANICAL DATA**

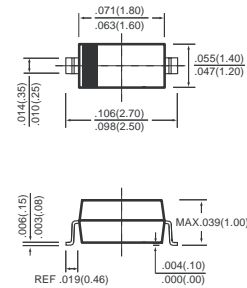
- \* Case: Molded plastic
- \* Epoxy: UL 94V-O rate flame retardant
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 0.004 grams

**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	SD103CWS	UNITS
Peak Repetitive Peak reverse voltage	$V_{RMR}$	20	Volts
Working Peak Reverse Voltage	$V_{RWR}$		
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	14	Volts
Maximum Forward Continuous Current	$I_{FM}$	350	mAmps
Non-Repetitive Peak Forward Surge Current @ $t < 1.0\text{S}$	$I_{FSM}$	1.5	Amps
Maximum Power Dissipation	$P_D$	200	mW
Thermal Resistance junction to ambient	$R_{\theta JA}$	300	$^{\circ}\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to + 125	$^{\circ}\text{C}$

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

CHARACTERISTICS	SYMBOL	MIN.	TYP.	MAX.	UNITS
Reverse Breakdown Voltage ( $I_R=10\mu\text{A}$ )	$V_{(BR)R}$	20	-	-	V
Reverse voltage leakage current ( $V_R=10\text{V}$ )	$I_R$	-	-	5.0	$\mu\text{A}$
Forward voltage ( $I_F=20\text{mA}$ ) ( $I_F=200\text{mA}$ )	$V_F$	-	-	0.37	V
		-	-	0.60	
Capacitance between terminals ( $V_R=0\text{V}, f=1\text{MHz}$ )	$C_T$	-	50	-	pF
Reverse Recovery Time ( $I_F=I_R=200\text{mA}, R_L=100\Omega, I_{rr}=0.1 \times I_R$ )	$t_{rr}$	-	10	-	ns

## RATING AND CHARACTERISTICS CURVES ( SD103CWS )

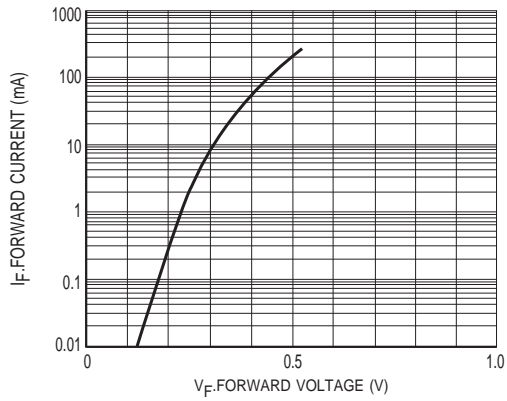


Figure1 Typical Forward characteristics

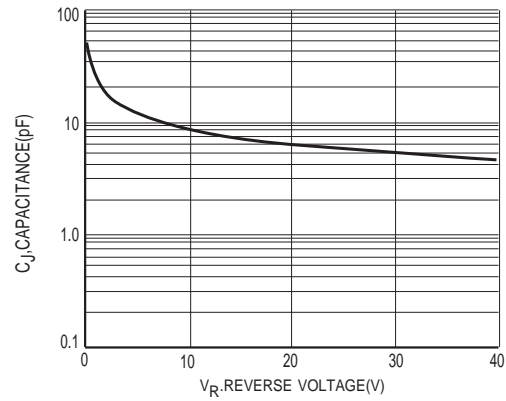


Figure2 Typical Junction Capacitance vs Reverse Voltage

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