

SCHOTTKY DIODES

FEATURES

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

MECHANICAL DATA

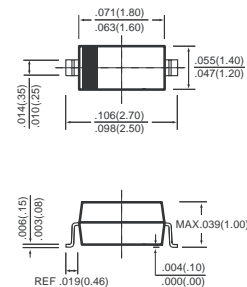
- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.004 grams

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	SD101AWS	UNITS	
Peak Repetitive Peak reverse voltage	V_{RMR}	60	Volts	
Working Peak Reverse Voltage	V_{RWR}			
DC Blocking Voltage	V_R			
RMS Reverse Voltage	$V_{R(RMS)}$	42	Volts	
Maximum Forward Continuous Current	I_{FM}	15	mAmps	
Non-Repetitive Peak Forward Surge Current	I_{FSM}	@ $t < 1.0\text{S}$	50	mAmps
		@ $t = 10\mu\text{S}$	2.0	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	$V_{(BR)R}$	60	-	-	V
Reverse voltage leakage current	I_R	-	-	0.2	μA
Forward voltage	V_F	-	-	0.41	V
				1.00	
Capacitance between terminals	C_T	-	-	2.0	pF
Reverse Recovery Time	t_{rr}	-	-	1.0	ns

RATING AND CHARACTERISTICS CURVES (SD101AWS)

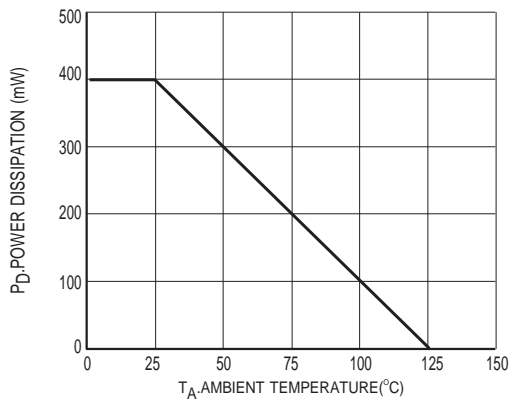


Figure1 Power Derating Curve

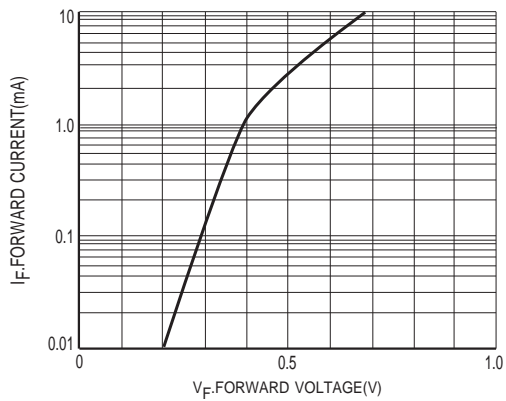


Figure2 Typical Forward Characteristics

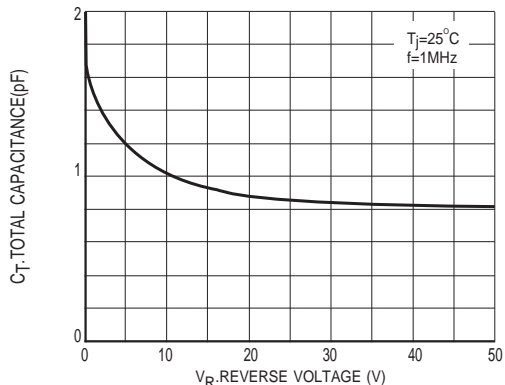


Figure3 Typical Total Capacitance vs Reverse Voltage

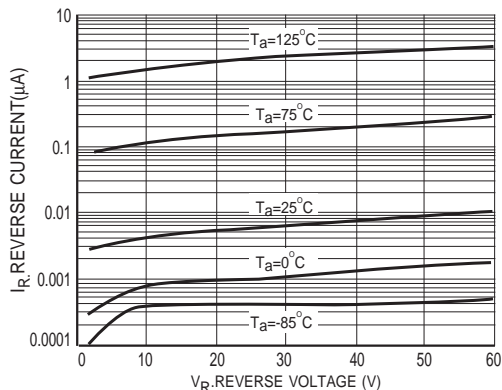


Figure4 Typical Reverse Characteristics

DISCLAIMER NOTICE

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.