

SCHOTTKY DIODES

FEATURES

- * High current rectifier Schottky diode
- * Low voltage, low inductance
- * For power supply

MECHANICAL DATA

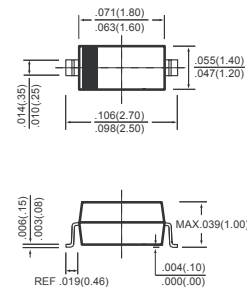
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.004 grams

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	RB500V-40	UNITS
Maximum Peak reverse voltage	V_{RM}	45	Volts
Maximum DC reverse voltage	V_R	40	Volts
Maximum Peak Forward Surge Current	I_{FSM}	1	Amps
Mean rectifying current	I_O	0.1	Amps
Operating and Storage Temperature Range	T_J, T_{STG}	-40 to + 125	$^{\circ}\text{C}$

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

CHARACTERISTICS	SYMBOL	MIN.	TYP.	MAX.	UNITS
Reverse voltage leakage current ($V_R=10\text{V}$)	I_R	-	-	1	μA
Forward voltage ($I_F=10\text{mA}$)	V_F	-	-	0.45	V
Diode Capacitance ($V_R=10\text{V}, f=1\text{MHz}$)	C_T	-	6	-	pF

Note: "Fully ROHS Compliant", "100% Sn plating (Pb-free)".

RATING AND CHARACTERISTICS CURVES (RB500V-40)

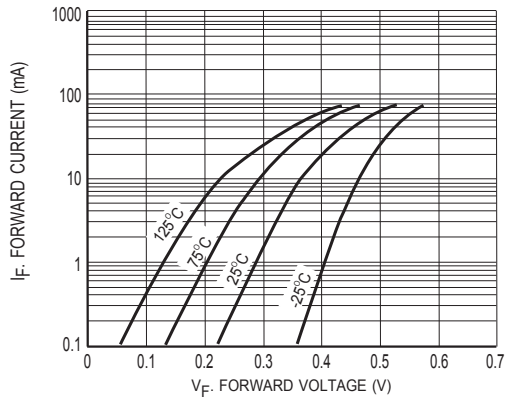


Figure1 Forward characteristics

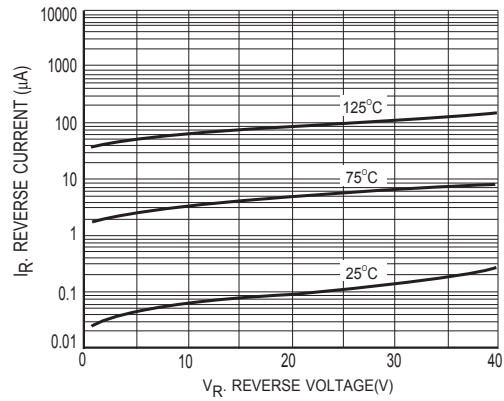


Figure2 Reverse characteristics

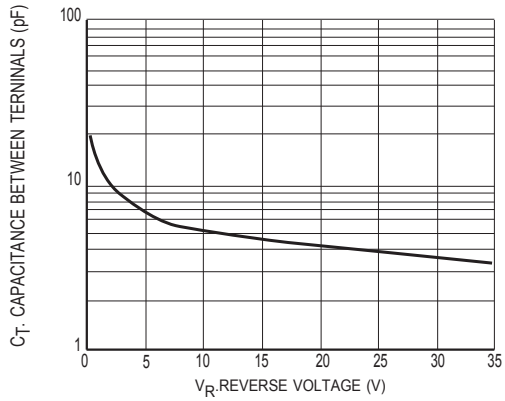


Figure3 Capacitance between terminals characteristics

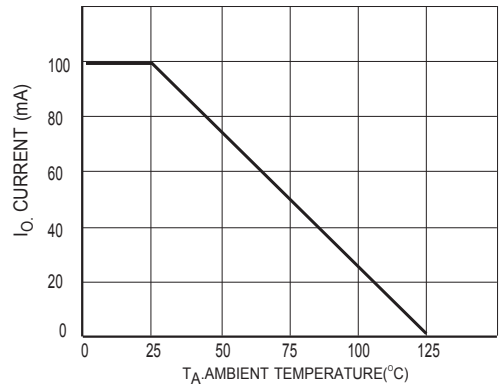


Figure4 Derating curve(mounting on glass epoxy PCBs)

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.