

**SOT-23 SCHOTTKY DIODE**

**FEATURES**

- \* Power Dissipation  
PD : 200mW(Tamb= 25°C)

**MECHANICAL DATA**

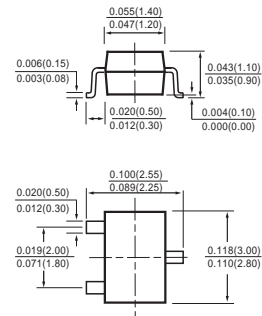
- \* Case: Molded plastic
- \* Epoxy: UL 94V-O rate flame retardant
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 0.008 gram

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.



**SOT-23**



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS** ( @ TA = 25°C unless otherwise noted )

RATINGS	SYMBOL	VALUE	UNITS
Peak Repetitive Peak reverse voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>R</sub>	30	V
Forward Continuous Current	I <sub>F</sub>	200	mA
Max. Steady State Power Dissipation @TA=25°C	P <sub>D</sub>	200	mW
Max. Operating Temperature Range	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

**ELECTRICAL CHARACTERISTICS** ( @ TA = 25°C unless otherwise noted )

CHARACTERISTICS	SYMBOL	MIN.	TYP.	MAX.	UNITS
Reverse breakdown voltage (I <sub>R</sub> =100μA)	V <sub>(BR)</sub> R	30	-	-	V
Reverse voltage leakage current (V <sub>R</sub> =25V)	I <sub>R</sub>	-	-	2	μA
Forward voltage (I <sub>F</sub> =0.1mA) (I <sub>F</sub> =1mA) (I <sub>F</sub> =10mA) (I <sub>F</sub> =30mA) (I <sub>F</sub> =100mA)	V <sub>F</sub>	-	-	0.24 0.32 0.40 0.50 1	V
Diode capacitance (V <sub>R</sub> =1V, f=1MHz)	C <sub>D</sub>	-	-	10	pF
Reveres recovery time (I <sub>F</sub> =I <sub>R</sub> =10mA, I <sub>rr</sub> =0.1 X I <sub>R</sub> , R <sub>L</sub> =100Ω)	t <sub>rr</sub>	-	-	5	nS

# RATING AND CHARACTERISTICS CURVES ( BAT54S)

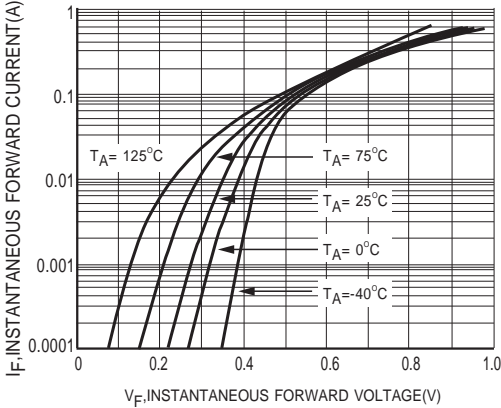


Figure1 Forward Characteristics

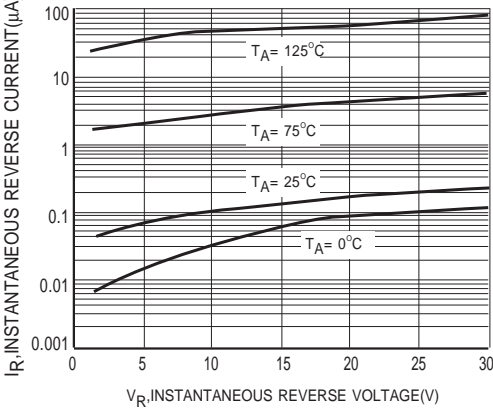


Figure2 Typical Reverse Capacitance

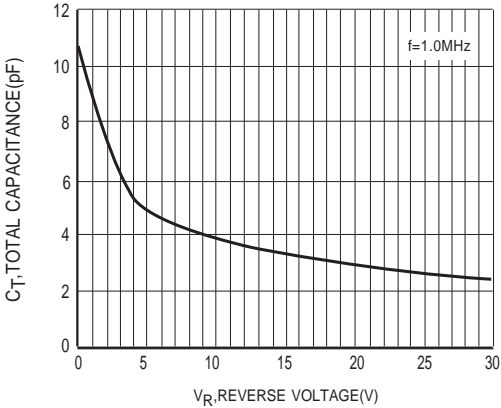


Figure3 Typical Capacitance vs Reverse Voltage

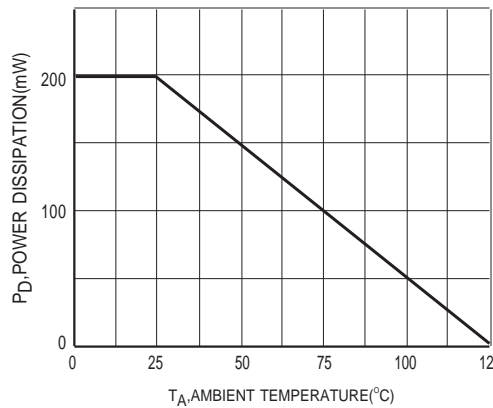


Figure4 Power Derating Curve

## 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.