



**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

**SOT-23**

Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**  
Ratings at 25°C ambient temperature unless otherwise specified.

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

RATINGS	SYMBOL	VALUE	UNITS
Peak Repetitive Peak reverse voltage	V <sub>R</sub>	30	V
Working Peak Reverse Voltage			
DC Blocking Voltage			
Forward Continuous Current	I <sub>F</sub>	200	mA
Max. Steady State Power Dissipation @T <sub>A</sub> =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)R</sub>	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)	V <sub>F</sub>	-	-	0.24	V
(I <sub>F</sub> =1mA)				0.32	
(I <sub>F</sub> =10mA)				0.40	
(I <sub>F</sub> =30mA)				0.50	
(I <sub>F</sub> =100mA)				1	
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 ( BAT54)

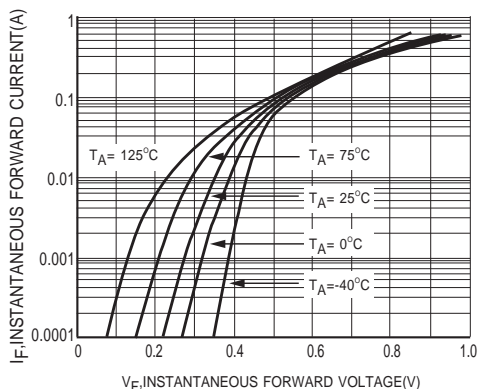


Figure1 Forward Characteristics

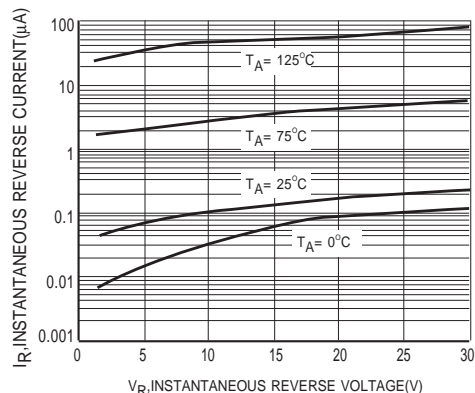


Figure2 Typical Reverse Capacitance

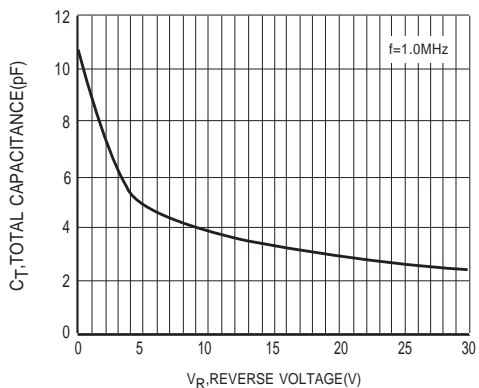


Figure3 Typical Capacitance vs Reverse Voltage

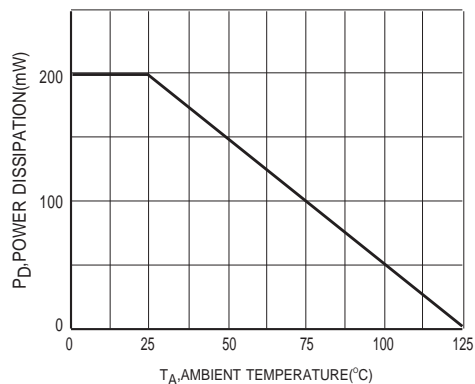


Figure4 Power Derating Curve



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