RECTRON
SEMICONDUCTOR
TECHNICAL SPECIFICATION

BAT54A

SOT-23 SCHOTTKY DIODE

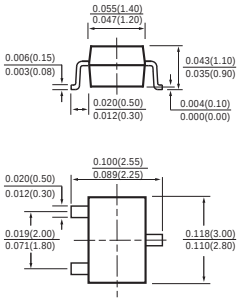
FEATURES

* 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 RATINGES (@ T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL	VALUE	UNITS
Peak Repetitive Peak reverse voltage Working Peak Reverse Voltage DC Blocking Voltage	V_R	30	V
Forward Continuous Current	I_F	200	mA
Max. Steady State Power Dissipation @T_A=25°C	P_D	200	mW
Max. Operating Temperature Range	T_J	150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

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

CHARACTERISTICS	SYMBOL	MIN.	TYP.	MAX.	UNITS
Reverse breakdown voltage (I_R=100μA)	$V_{(BR)R}$	30	-	-	V
Reverse voltage leakage current (V_R=25V)	I_R	-	-	2	μA
Forward voltage (I_F=0.1mA) (I_F=1mA) (I_F=10mA) (I_F=30mA) (I_F=100mA)	V_F	-	-	0.24 0.32 0.40 0.50 1	V
Diode capacitance (V_R=1V,f=1MHz)	C_D	-	-	10	pF
Reveres recovery time (I_F=I_R=10mA,I_{rr}=0.1 X I_R, R_L=100Ω)	t_{rr}	-	-	5	nS

2006-3

RATING AND CHARACTERISTICS CURVES (BAT54A)

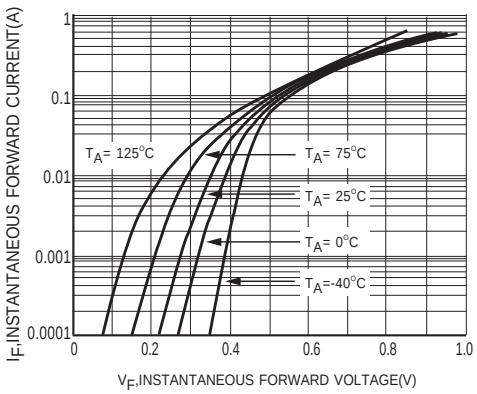


Figure1 Forward Characteristics

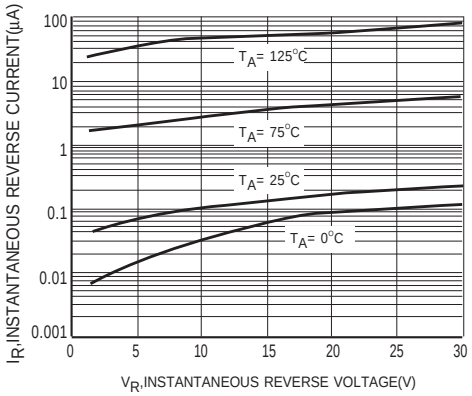


Figure2 Typical Reverse Capacitance

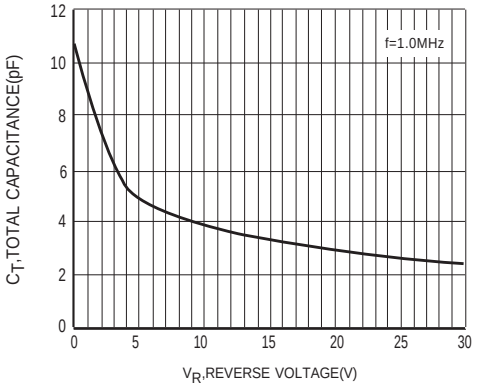


Figure3 Typical Capacitance vs Reverse Voltage

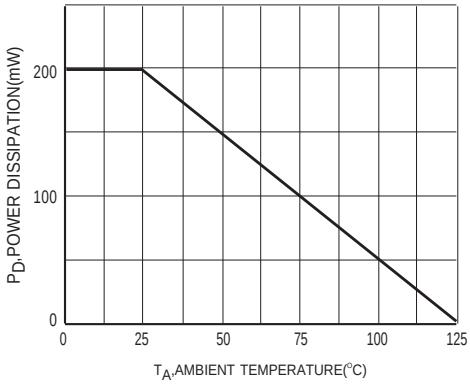


Figure4 Power Derating Curve

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