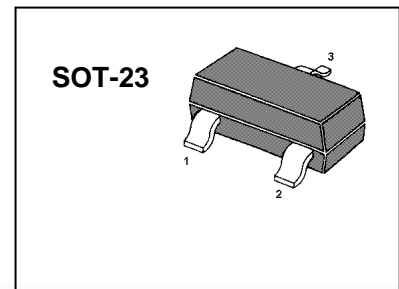


# BAT54... SCHOTTKY DIODES

## FEATURES

Extremely Fast Switching Speed



BAT54 MARKING: KL1

BAT54A MARKING: KL2

BAT54C MARKING: KL3

BAT54S MARKING: KL4

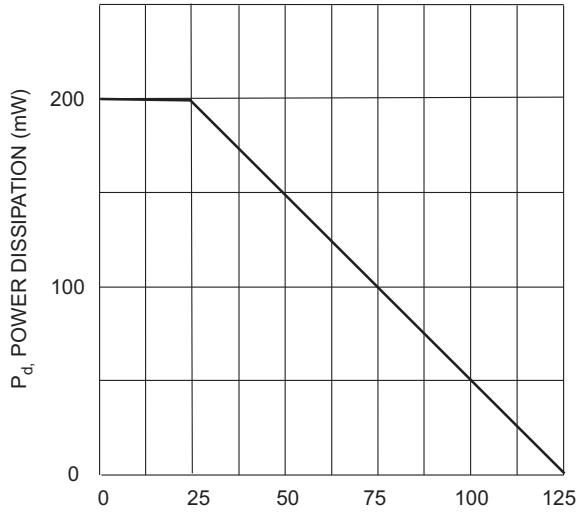
## Maximum Ratings @T<sub>A</sub>=25°C

Parameter	Symbol	Limits	Unit
Peak Repetitive Peak reverse voltage	V <sub>RRM</sub>	30	V
Working Peak Reverse Voltage	V <sub>RWM</sub>		
Reverse Breakdown Voltage	V <sub>R</sub>		
Forward Continuous Current	I <sub>FM</sub>	200	mA
Power Dissipation	P <sub>D</sub>	200	mW
Storage temperature	T <sub>STG</sub>	-55-150	°C

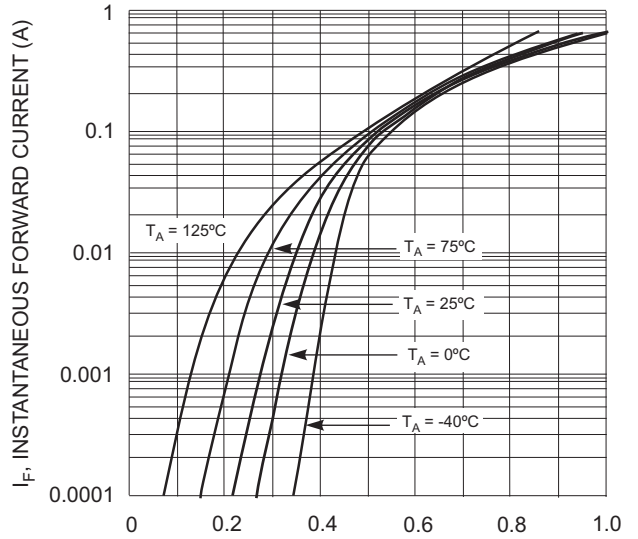
## Electrical Characteristics @T<sub>A</sub>=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	V <sub>(BR)R</sub>	30			V	I <sub>R</sub> =100μA
Forward voltage	V <sub>F1</sub>			0.24	V	I <sub>F</sub> =0.1mA
	V <sub>F2</sub>			0.32	V	I <sub>F</sub> =1mA
	V <sub>F3</sub>			0.40	V	I <sub>F</sub> =10mA
	V <sub>F4</sub>			0.50	V	I <sub>F</sub> =30mA
	V <sub>F5</sub>			1	V	I <sub>F</sub> =100mA
Reverse current	I <sub>R</sub>			2	μA	V <sub>R</sub> =25V
Diode Capacitance	C <sub>D</sub>			10	pF	V <sub>R</sub> =1V, f=1MHz
Reverse Recovery Time	t <sub>rr</sub>			5	nS	I <sub>F</sub> =I <sub>R</sub> =10mA I <sub>rr</sub> =0.1X I <sub>R</sub> , R <sub>L</sub> =100Ω

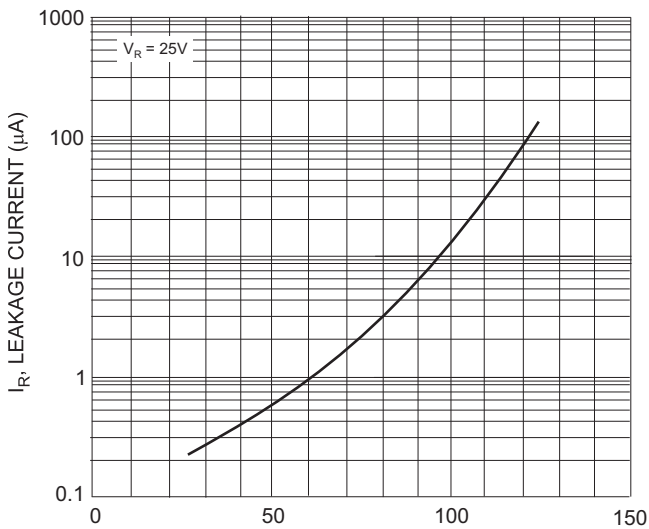
Typical Characteristics



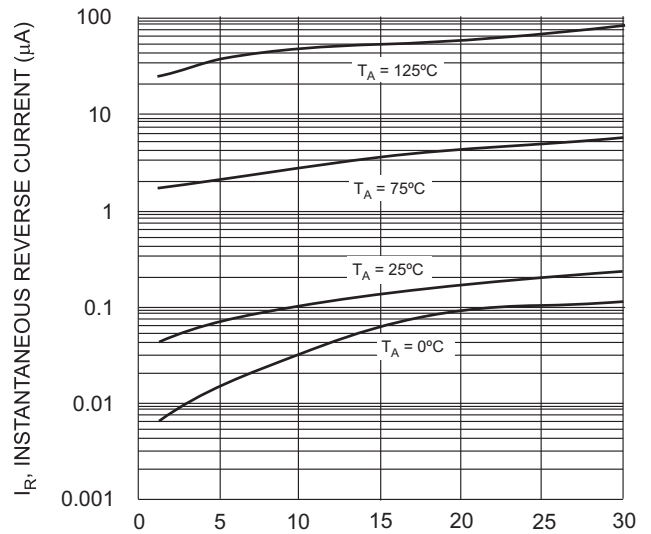
$T_A$ , AMBIENT TEMPERATURE (°C)  
Fig. 1 Power Derating Curve



$V_{F1}$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Forward Characteristics



$T_j$ , JUNCTION TEMPERATURE (°C)  
Fig. 3, Typical Reverse Characteristics



$V_R$ , INSTANTANEOUS REVERSE VOLTAGE (V)  
Fig. 4 Typical Reverse Characteristics

PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23

