



BAT54 / A / C / S

Surface Mount Schottky Barrier Diode



Voltage Range
30 Volts
200m Watts Power Dissipation

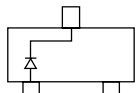
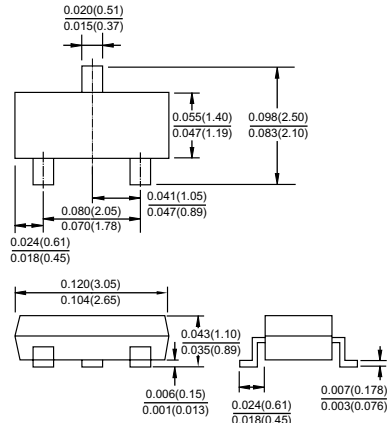
SOT-23

Features

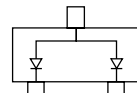
- ✧ Low turn-on voltage
- ✧ Fast switching
- ✧ PN junction guard ring for transient and ESD protection

Mechanical Data

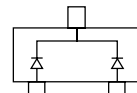
- ✧ Case: SOT-23, Molded plastic
- ✧ Terminals: Solderable per MII-STD-202, Method 208
- ✧ Marking & Polarity: See diagram
- ✧ Weight: 0.008 gram (approx.)



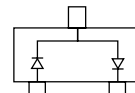
BAT54 Marking: L4



BAT54A Marking: L42



BAT54C Marking: L43



BAT54S Marking: L44

Maximum Ratings $T_A=25^\circ\text{C}$ unless otherwise specified

Type Number	Symbol	Value	Units
Peak Repetitive Reverse Voltage	VRRM	30	V
Working Peak Reverse Voltage	VRWM		
DC Blocking Voltage	VR		
Forward Continuous Current	IF	200	mA
Repetitive Peak Forward Current	IFM	300	mA
Forward Surge Current @ t=1.0s	IFSM	600	mA
Power Dissipation (Note 1)	Pd	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	500	$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to + 125	$^\circ\text{C}$

Electrical Characteristics

Type Number	Symbol	Min	Typ	Max	Units
Reverse Breakdown Voltage (Note 1)	V(BR)R	30	-	-	V
Reverse Leakage Current (Note 1) VR=25V	IR	-	--	2.0	μA
Forward Voltage (Note 1)	VF	-	-	240	mV
				320	
				400	
				500	
				1000	
Junction Capacitance VR=0, f=1.0MHz	Cj	-	-	10	pF
Reverse Recovery Time (Note 2)	trr	-	-	5.0	nS

Notes: 1. Short Duration Pulse Test used to Minimize Self-Heating Effect.

2. Reverse Recovery Test Conditions: IF=10mA through IR=10mA to IR=1.0mA, RL=100 Ω .

RATINGS AND CHARACTERISTIC CURVES (BAT54 / A / C / S)

FIG.1- POWER DERATING CURVE

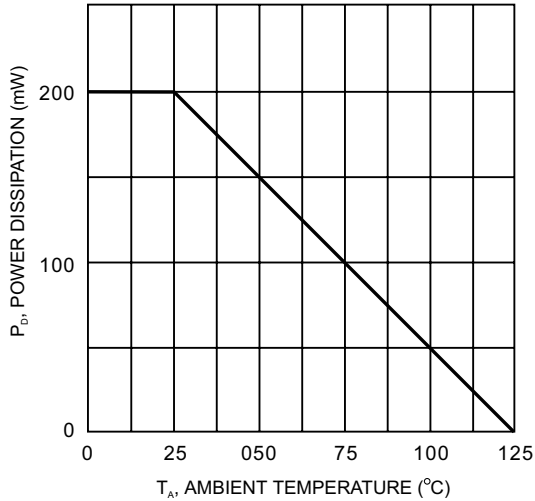


FIG.2- TYPICAL FORWARD CHARACTERISTICS

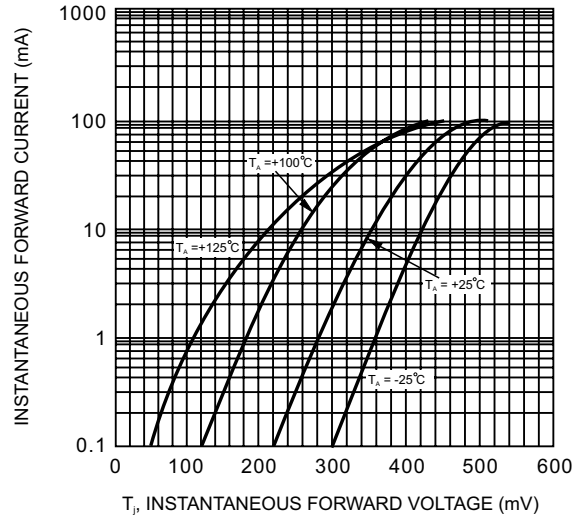
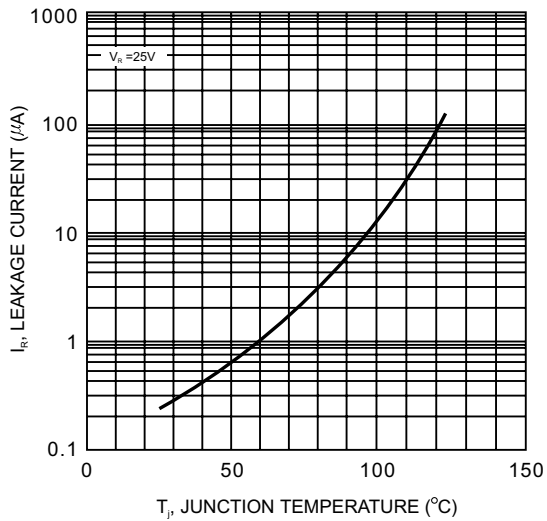


FIG.3- TYPICAL REVERSE CHARACTERISTICS





LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.