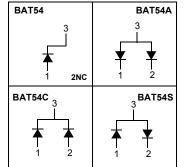
BAT54/A/C/S **Schottky Diodes** 

SOT-23

FAIRCHILD SEMICONDUCTOR

**Connection Diagram** 



# Absolute Maximum Ratings \* T<sub>a</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value	Unit	
V <sub>RRM</sub>	Maximum Repetitive Reverse Voltage 30		V	
I <sub>F(AV)</sub>	Average Rectified Forward Current	200	mA	
I <sub>FSM</sub>	Non-repetitive Peak Forward Surge Current 600   Pulse Width = 1.0 second 600		mA	
T <sub>STG</sub>	Storage Temperature Range	-55 to +150	°C	
TJ	Operating Junction Temperature	-55 to +150	°C	

3

L4P

MARKING BAT54 = L4P BAT54A = L42

BAT54C = L43 BAT54S = L44

2

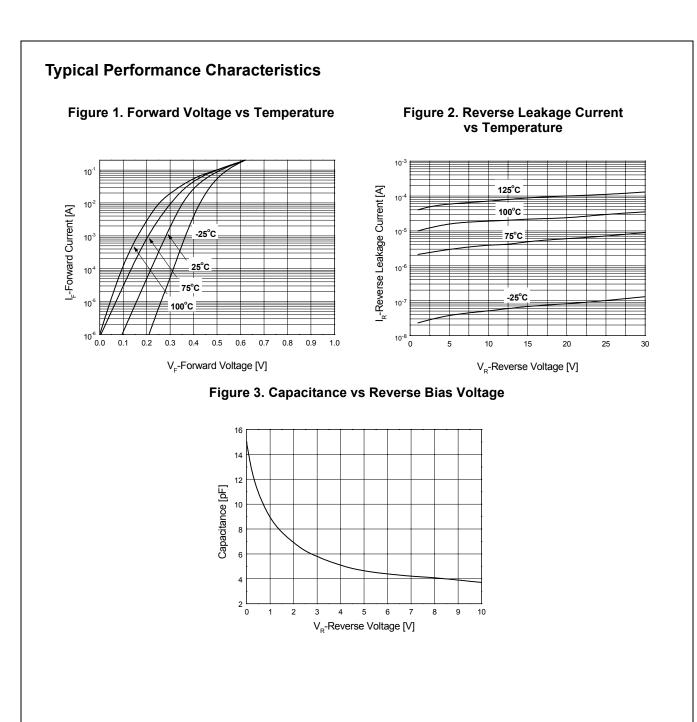
\* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

# **Thermal Characteristics**

Symbol	Parameter	Value	Unit	
PD	Power Dissipation	290	mW	
$R_{ ext{ heta}JA}$	Thermal Resistance, Junction to Ambient	430	°C/W	

## Electrical Characteristics T<sub>C</sub> = 25°C unless otherwise noted

Symbol	Parameter	Conditions	Min.	Max.	Units
V <sub>R</sub>	Breakdown Voltage	I <sub>R</sub> = 10μA	30		V
V <sub>F</sub>	Forward Voltage	$I_{F} = 0.1mA$ $I_{F} = 1mA$ $I_{F} = 10mA$ $I_{F} = 30mA$ $I_{F} = 100mA$		240 320 400 500 0.8	mV mV mV mV V
I <sub>R</sub>	Reverse Leakage	V <sub>R</sub> = 25V 2		2	μA
CT	Total Capacitance	V <sub>R</sub> = 1V, f = 1.0MHz		10	pF
t <sub>rr</sub>	Reverse Recovery Time	$I_F = I_R = 10$ mA, $I_{RR} = 1.0$ mA, $R_L = 100\Omega$		5.0	ns



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### **PRODUCT STATUS DEFINITIONS**

#### **Definition of Terms**

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