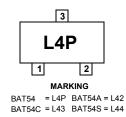
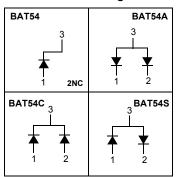


# BAT54/A/C/S Schottky Diodes





### **Connection Diagram**



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

Symbol	Parameter	Value	Unit
$V_{RRM}$	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 Pulse Width = 1.0 second	600	mA
T <sub>STG</sub>	Storage Temperature Range	-55 to +150	°C
T <sub>J</sub>	Operating Junction Temperature	-55 to +150	°C

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

## **Thermal Characteristics**

Symbol	Parameter	Value	Unit
$P_{D}$	Power Dissipation	290	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	430	°C/W

## **Electrical Characteristics** $T_C = 25$ °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	$I_F = 0.1\text{mA}$ $I_F = 1\text{mA}$ $I_F = 10\text{mA}$ $I_F = 30\text{mA}$ $I_F = 100\text{mA}$		240 320 400 500 0.8	mV mV mV V
I <sub>R</sub>	Reverse Leakage	V <sub>R</sub> = 25V		2	μΑ
C <sub>T</sub>	Total Capacitance	V <sub>R</sub> = 1V, f = 1.0MHz		10	pF
t <sub>rr</sub>	Reverse Recovery Time	$I_F = I_R = 10 \text{mA}, I_{RR} = 1.0 \text{mA},$ $R_L = 100 \Omega$		5.0	ns

## **Typical Performance Characteristics**

Figure 1. Forward Voltage vs Temperature

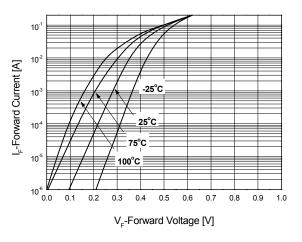


Figure 2. Reverse Leakage Current vs Temperature

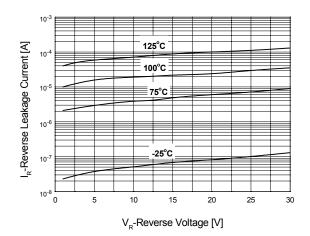
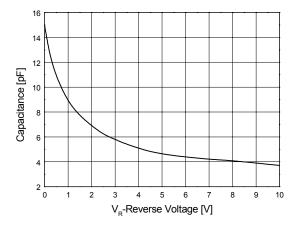


Figure 3. Capacitance vs Reverse Bias Voltage



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