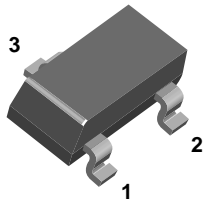
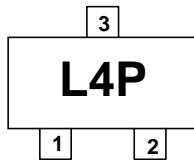


BAT54/A/C/S



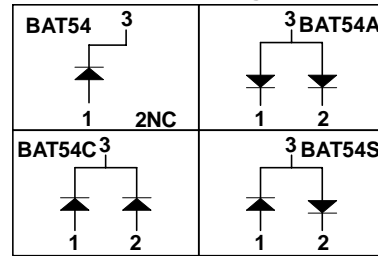
SOT-23



MARKING

BAT54 = L4P BAT54A = L42
BAT54C = L43 BAT54S = L44

Connection Diagrams



Schottky Diodes

Absolute Maximum Ratings* $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{RRM}	Maximum Repetitive Reverse Voltage	30	V
$I_{F(AV)}$	Average Rectified Forward Current	200	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current Pulse width = 1.0 second	600	mA
T_{stg}	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
T_J	Operating Junction Temperature	-55 to +150	$^\circ\text{C}$

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

Thermal Characteristics

Symbol	Parameter	Value	Units
P_D	Power Dissipation	290	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	430	$^\circ\text{C/W}$

Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Conditions	Min	Max	Units
V_R	Breakdown Voltage	$I_R = 10 \mu\text{A}$	30		V
V_F	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 1.0	mV mV mV mV V
I_R	Reverse Current	$V_R = 25 \text{ V}$		2	μA
C_T	Total Capacitance	$V_R = 1 \text{ V}, f = 1.0 \text{ MHz}$		10	pf
t_{rr}	Reverse Recovery Time	$I_F = I_R = 10 \text{ mA}, I_{RR} = 1.0 \text{ mA}, R_L = 100 \Omega$		5.0	ns

Typical Characteristics

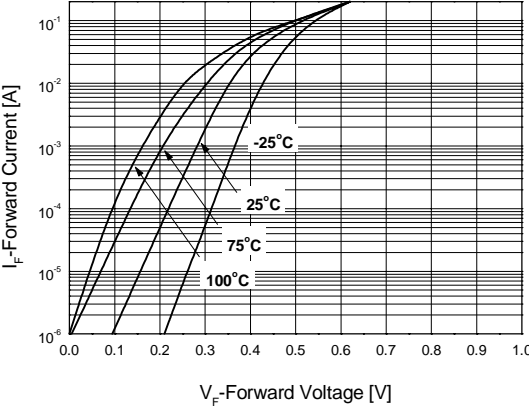


Figure 1. Forward Voltage vs. Temperature

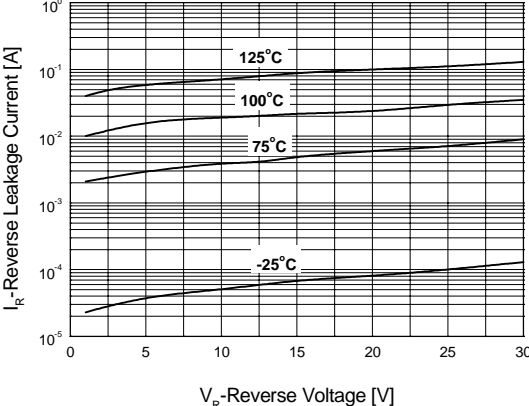


Figure 2. Reverse Leakage Current vs. Temperature

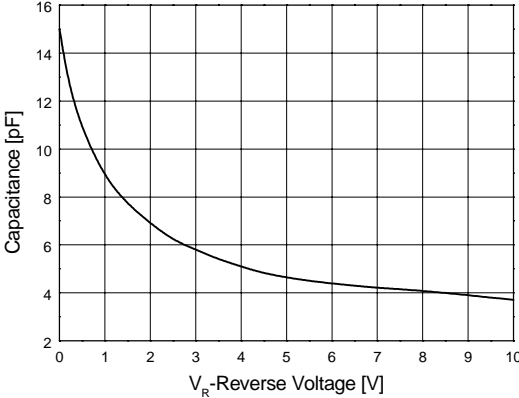


Figure 3. Capacitance vs Reverse Bias Voltage

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EcoSPARK™	HiSeC™	MSXPro™	RapidConfigure™	UHC™
E ² CMOS™	I ² C™	OCX™	RapidConnect™	UltraFET®
EnSigna™	ImpliedDisconnect™	OCXPro™	SILENT SWITCHER®	VCX™
FACT™	ISOPLANAR™	OPTOLOGIC®	SMART START™	
Across the board. Around the world.™		OPTOPLANAR™	SPM™	
The Power Franchise™		PACMAN™	Stealth™	
Programmable Active Droop™		POP™	SuperSOT™-3	

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