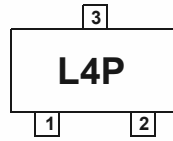
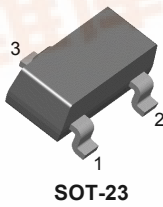




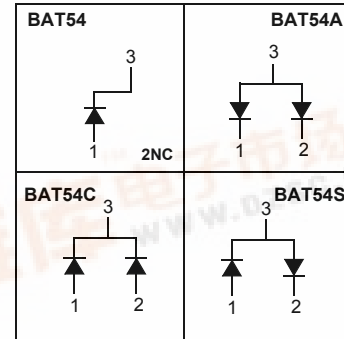
February 2005

BAT54/A/C/S Schottky Diodes



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

Connection Diagram



Absolute Maximum Ratings * T_a = 25°C unless otherwise noted

Symbol	Parameter	Value	Unit
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	°C
T _J	Operating Junction Temperature	-55 to +150	°C

* 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 _{θJA}	Thermal Resistance, Junction to Ambient	430	°C/W

Electrical Characteristics T_C = 25°C unless otherwise noted

Symbol	Parameter	Conditions	Min.	Max.	Units
V _R	Breakdown Voltage	I _R = 10μA	30		V
V _F	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 _R	Reverse Leakage	V _R = 25V		2	μA
C _T	Total Capacitance	V _R = 1V, f = 1.0MHz		10	pF
t _{rr}	Reverse Recovery Time	I _F = I _R = 10mA, I _{RR} = 1.0mA, R _L = 100Ω		5.0	ns



Typical Performance Characteristics

Figure 1. Forward Voltage vs Temperature

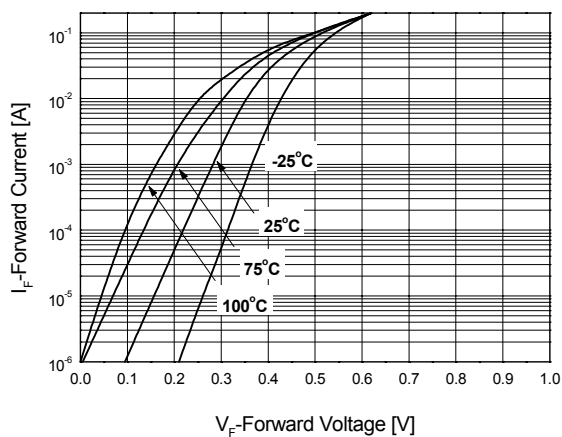


Figure 2. Reverse Leakage Current vs Temperature

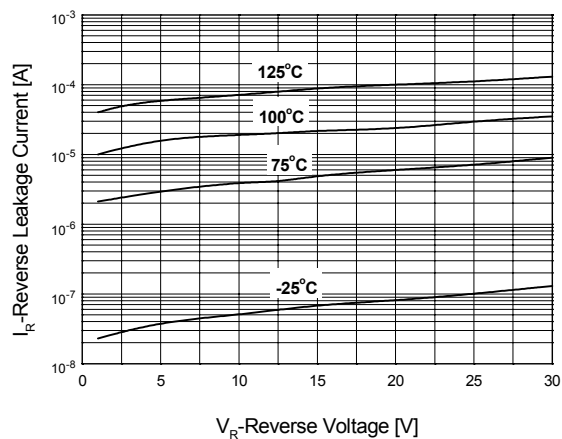
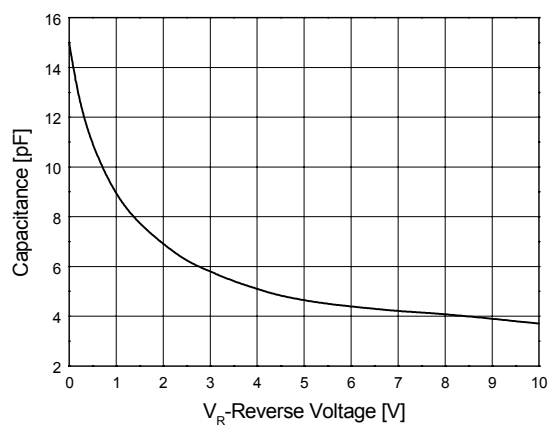


Figure 3. Capacitance vs Reverse Bias Voltage



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EnSigna™	i-Lo™	MSXPro™	Quiet Series™	TINYOPTO™
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FACT Quiet Series™		OCXPro™	RapidConnect™	UHC™
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Programmable Active Droop™		PACMAN™	SMART START™	VCX™

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