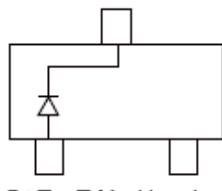
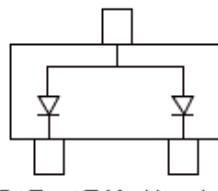


**SWITCHING DIODE**
**FEATURES**

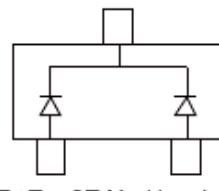
- Low Forward Voltage Drop
- Fast Switching

**SOT-523**


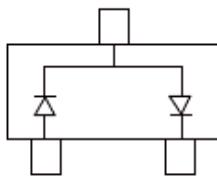
BAT54T Marking: L1



BAT54AT Marking: L2



BAT54CT Marking: L3



BAT54ST Marking: L4

**Maximum Ratings @ $T_A=25^\circ\text{C}$** 

Parameter	Symbol	Limits	Unit
<b>Non-Repetitive Peak reverse voltage DC Blocking Voltage</b>	$V_{RM}$ $V_R$	30	V
<b>Average Rectified Output Current</b>	$I_o$	200	mA
<b>Power Dissipation</b>	$P_d$	150	mW
<b>Junction temperature</b>	$T_J$	125	$^\circ\text{C}$
<b>Storage temperature range</b>	$T_{STG}$	-65-125	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)**

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
<b>Reverse breakdown voltage</b>	$V_{(BR)}$	$I_R= 100\mu\text{A}$	30		V
<b>Reverse voltage leakage current</b>	$I_R$	$V_R=25\text{V}$		2	$\mu\text{A}$
<b>Forward voltage</b>	$V_F$	$I_F=0.1\text{mA}$ $I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=30\text{mA}$ $I_F=100\text{mA}$		240 320 400 500 1000	mV
<b>Total capacitance</b>	$C_T$	$V_R=1\text{V}, f=1\text{MHz}$		10	pF
<b>Reverse recovery time</b>	$t_{rr}$	$I_F=I_R=10\text{mA}$ , $I_{rr}=0.1 \times I_R, R_L=100\Omega$		5	nS

## Typical Characteristics

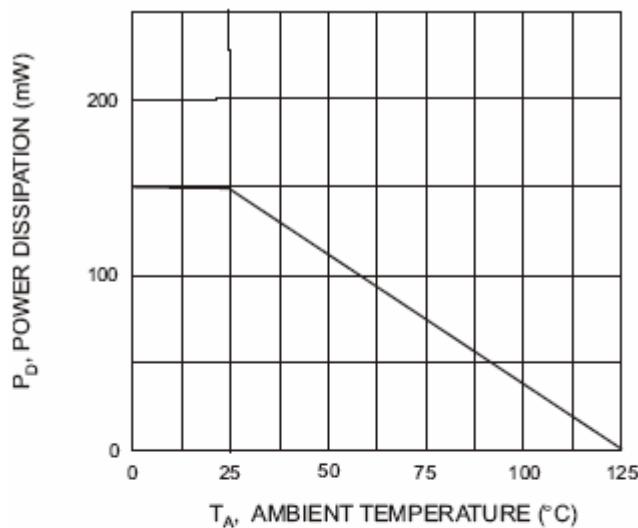


Fig. 1 Power Derating Curve

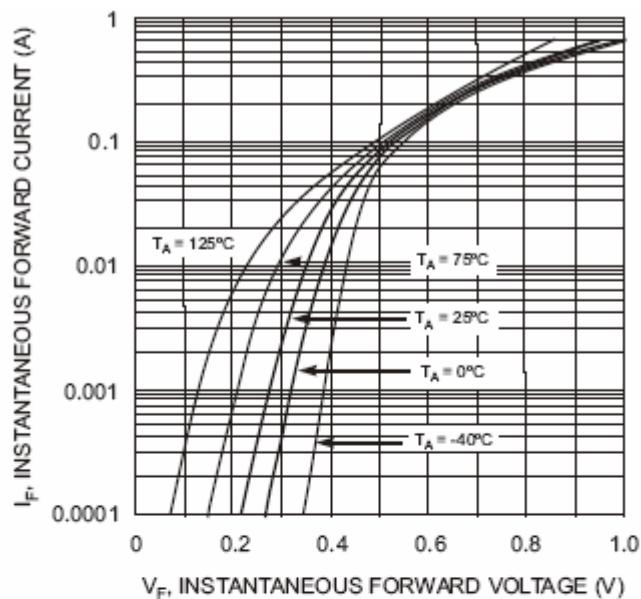


Fig. 2 Forward Characteristics

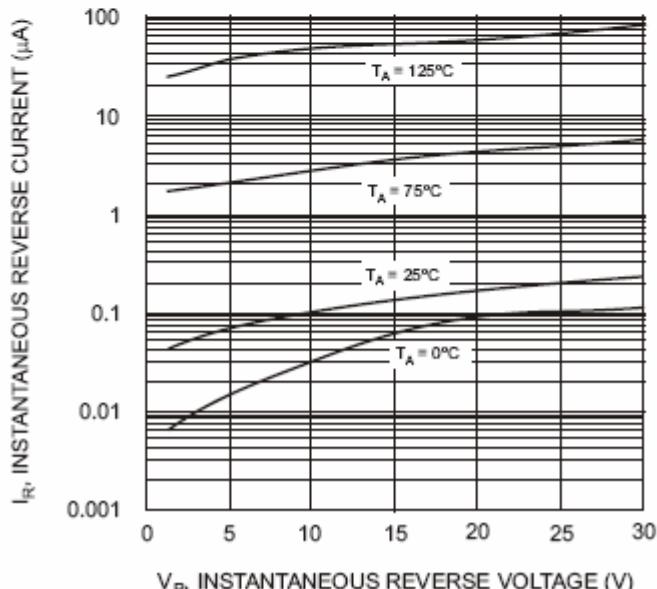


Fig. 3 Typical Reverse Characteristics

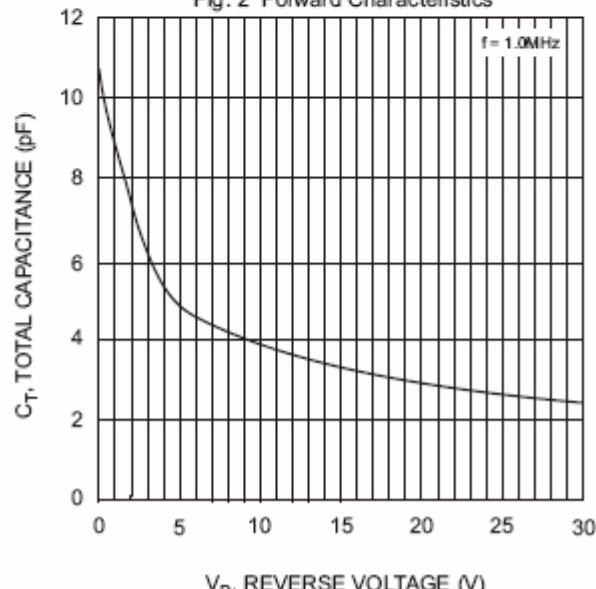


Fig. 4 Typical Capacitance vs. Reverse Voltage