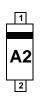


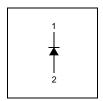
March 2010

BAT54HT1G **Small Signal Diode**





Connection Diagram



Absolute Maximum Ratings * $T_A = 25$ °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	-65 to +150	°C
TJ	Operating Junction Temperature	-55 to +150	°C

^{*} These ratings are limiting values above which the serviceability of the diode may be impaired.

NOTES:

- 1) These ratings are based on a maximum junction temperature of 150 degrees C.
- 2) These are steady limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Thermal Characteristics

Symbol	Parameter	Value	Units
P_{D}	Power Dissipation	200	mW
$R_{ heta JA}$	Thermal Resistance, Junction to Ambient	600	°C/W

Electrical Characteristics T_A=25°C unless otherwise noted

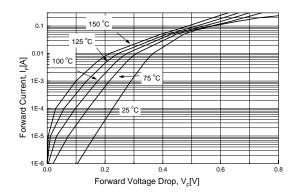
Symbol	Parameter	Test Conditions	Min.	Max.	Units
V _R	Breakdown Voltage	I _R = 10μA	30		V
V _F	Forward Voltage	$I_F = 0.1 \text{mA}$ $I_F = 1.0 \text{mA}$ $I_F = 10 \text{mA}$ $I_F = 30 \text{mA}$ $I_F = 100 \text{mA}$		240 320 400 500 0.8	mV mV mV mV
I _R	Reverse Leakage	V _R = 25V		2.0	μΑ
C _T	Total Capacitance	V _R = 1V, f = 1.0MHz		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

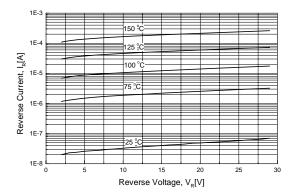
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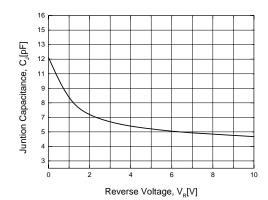
BAT54HT1G Rev. A1

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Typical Performance Characteristics

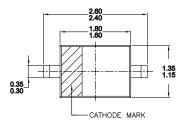


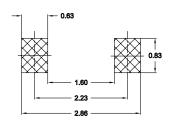


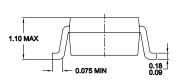


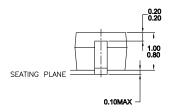
Physical Dimension

SOD-323









NOTES: UNLESS OTHERWISE SPECIFIED
A) THIS PACKAGE CONFORMS TO EIAJ SC76
B) ALL DIMENSIONS ARE IN MILLIMETERS.
C) DIMENSIONS ARE EXCLUSIVE OF BURRS,
MOLD FLASH, AND TIE BAR EXTRUSIONS.
D) DIMENSIONS AND TOLERANCES PER
ASME Y14.5M-1994

Dimensions in Millimeters



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