



BAT85

Small-Signal Diode
Schottky Diode

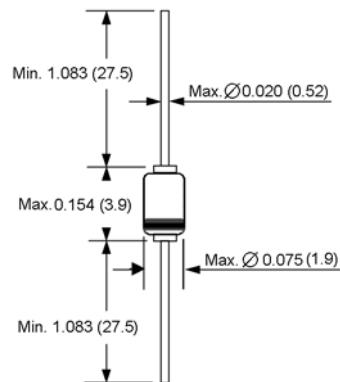
Features

- ◆ For general purpose applications.
- ◆ This diode features low turn-on voltage. This device is protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges
- ◆ This diode is also available in the MiniMELF case with type designation BAS85.

Mechanical Data

- ◆ Case: DO-35 Glass Case
- ◆ Weight: approx. 0.13g

DO-204AH (DO-35 Glass)



Dimensions in inches and (millimeters)

Maximum Ratings and Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Unit
Continuous reverse voltage	V_R	30	Volts
Forward continuous current at $T_{amb}=25^\circ C$	I_F	200 ⁽¹⁾	mA
Peak forward current at $T_{amb}=25^\circ C$	I_{FM}	300 ⁽¹⁾	mA
Surge forward current at $t_p < 1s$, $T_{amb}=25^\circ C$	I_{FSM}	600 ⁽¹⁾	mA
Power dissipation at $T_{amb}=65^\circ C$	P_{tot}	200 ⁽¹⁾	mW
Thermal resistance junction to ambient air	R_{BJA}	0.43 ⁽¹⁾	°C/W
Maximum junction temperature	T_j	125	°C
Ambient operating temperature range	T_A	-65 to +125	°C
Storage temperature range	T_S	-65 to +150	°C



Electrical Characteristics

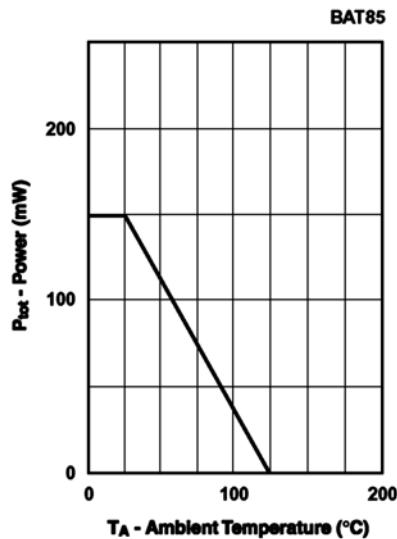
($T_j=25^\circ C$ unless otherwise noted.)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=10\mu A$ (pulsed)	30	-	-	Volts
Leakage current	I_R	$V_R=25V$	-	-	2	μA
Forward voltage pulse test $t_p < 300\mu s$, $\delta < 2\%$	V_F	$I_F=0.1mA$ $I_F=1mA$ $I_F=10mA$ $I_F=30mA$ $I_F=100mA$	- - - - -	- - - 0.5 -	0.24 0.32 0.4 - 0.8	Volt
Capacitance	C_{tot}	$V_R=1V$, $f=1MHz$	-	-	10	pF
Reverse recovery time	t_{rr}	$I_F=10mA$, $I_F=10mA$, to $I_R=1mA$	-	-	5	nS

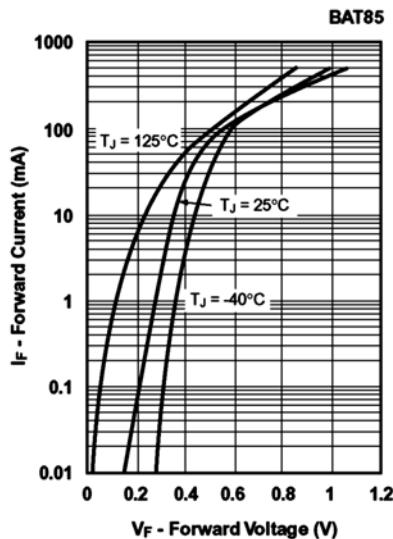
Notes: 1. Valid provided that leads at a distance of 4mm from case are kept at ambient temperature.

RATINGS AND CHARACTERISTIC CURVES

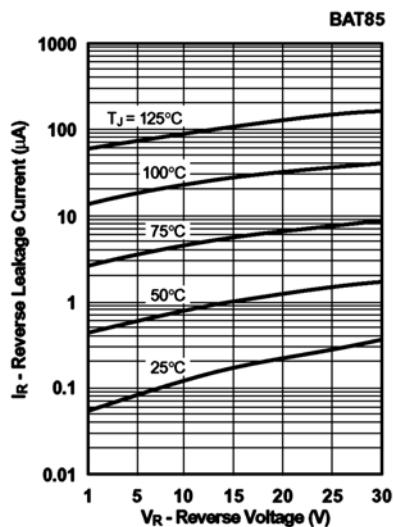
Admissible Power Dissipation vs. Ambient Temperature



Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance

