BAT85

SCHOTTKY BARRIER DIODE

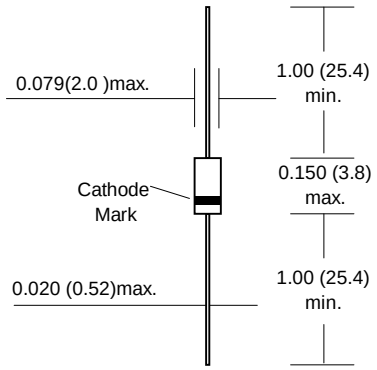
FEATURES :

- 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.
- Pb / RoHS Free

MECHANICAL DATA :

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

DO - 35 Glass
(DO-204AH)



Dimensions in inches and (millimeters)

Maximum Ratings and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	30	V
Continuous Forward Current	I_F	200(1)	mA
Peak Forward Current	I_{FM}	300(1)	mA
Forward Surge Current at tp < 1s	I_{FSM}	600(1)	mA
Power Dissipation (Infinite Heatsink)	P_D	200(1)	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	430(1)	°C/W
Junction Temperature	T_J	125	°C
Ambient Operating Temperature Range	Ta	-65 to + 125	°C
Storage temperature range	T_S	-65 to + 150	°C

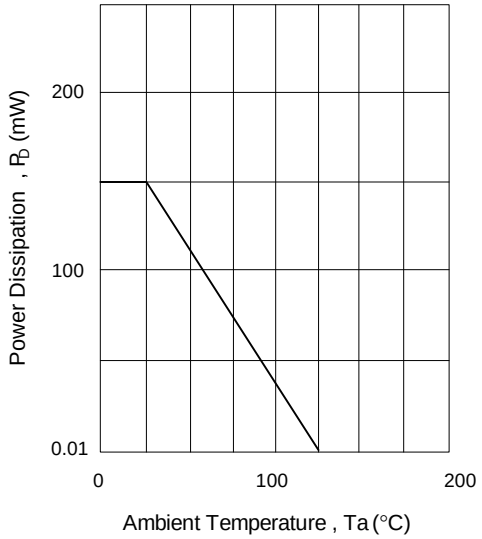
Note: (1) Valid provided that leads at a distance of 4mm from case are kept at ambient temperature.

Electrical Characteristics (T_J = 25°C unless otherwise noted)

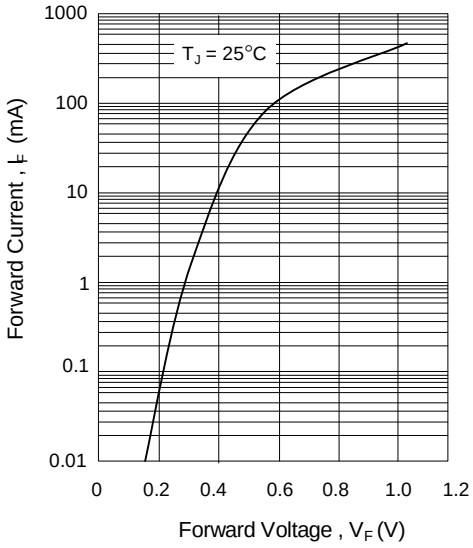
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	I_R = 10 µA (pulsed)	30	-	-	V
Reverse Current	I_R	V_R = 25 V	-	-	2	µA
Forward Voltage Pulse Test tp <300µs , δ <2%	V_F	I_F = 1mA I_F = 10mA I_F = 30mA I_F = 100mA	- - - -	- - 0.5 -	0.32 0.4 - 0.8	V
Diode Capacitance	Cd	V_R = 1V, f = 1MHz	-	-	10	pF
Reverse Recovery Time	Trr	I_F = 10mA to I_R = 10mA to I_R = 1 mA	-	-	5	ns

RATING AND CHARACTERISTIC CURVES (BAT85)

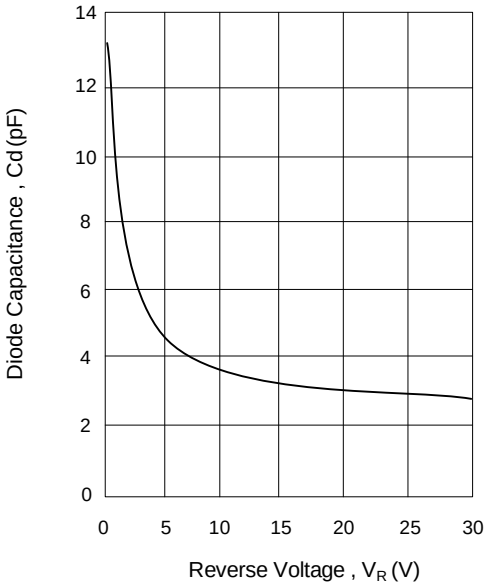
Admissible power dissipation vs. ambient temperature



Typical forward characteristics



Typical diode capacitance as a function of reverse voltage



Typical reverse characteristics