

BAT85

FEATURES :

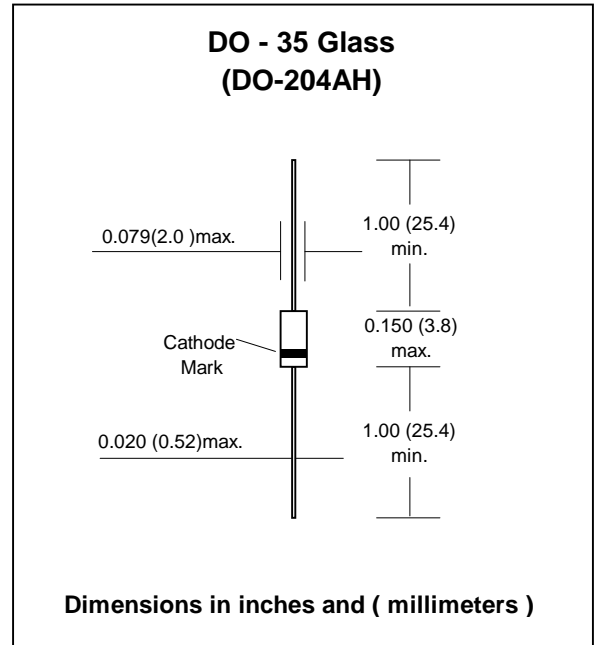
- For general purpose applications.
- This diode features low turn-on voltage. This device is protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges
- This diode is also available in the MiniMELF case with type designation BAS85.
- Pb / RoHS Free

MECHANICAL DATA :

Case: DO-35 Glass Case

Weight: approx. 0.13g

SCHOTTKY BARRIER DIODE



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 $t_p < 1s$	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	T_a	-65 to + 125	°C
Storage temperature range	T_s	-65 to + 150	°C

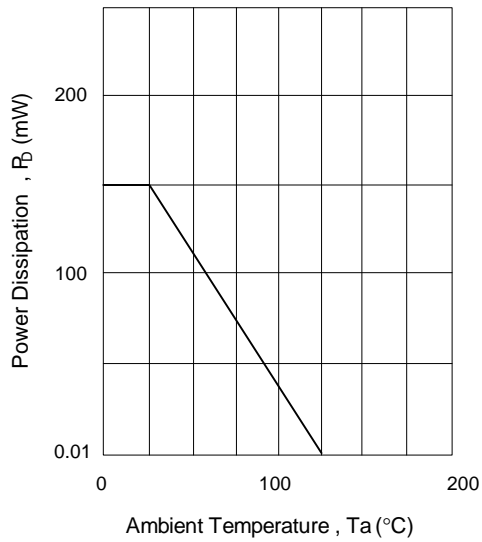
Note: (1) Valid provided that leads at a distance of 4mm from case are kept at ambient temperature.

Electrical Characteristics ($T_J = 25^\circ\text{C}$ unless otherwise noted)

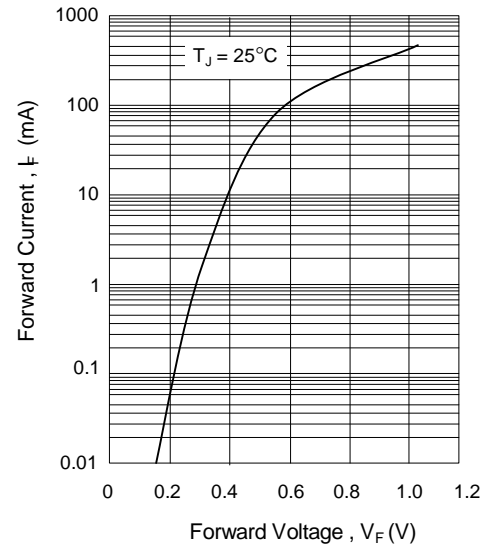
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 10 \mu\text{A}$ (pulsed)	30	-	-	V
Reverse Current	I_R	$V_R = 25 \text{ V}$	-	-	2	μA
Forward Voltage	V_F	$I_F = 1\text{mA}$	-	-	0.32	V
Pulse Test $t_p < 300\mu\text{s}$, $\delta < 2\%$		$I_F = 10\text{mA}$	-	-	0.4	
		$I_F = 30\text{mA}$	-	0.5	-	
		$I_F = 100\text{mA}$	-	-	0.8	
Diode Capacitance	C_d	$V_R = 1\text{V}$, $f = 1\text{MHz}$	-	-	10	pF
Reverse Recovery Time	T_{rr}	$I_F = 10\text{mA}$ to $I_R = 10\text{mA}$ to $I_R = 1 \text{ mA}$	-	-	5	ns

RATING AND CHARACTERISTIC CURVES (BAT85)

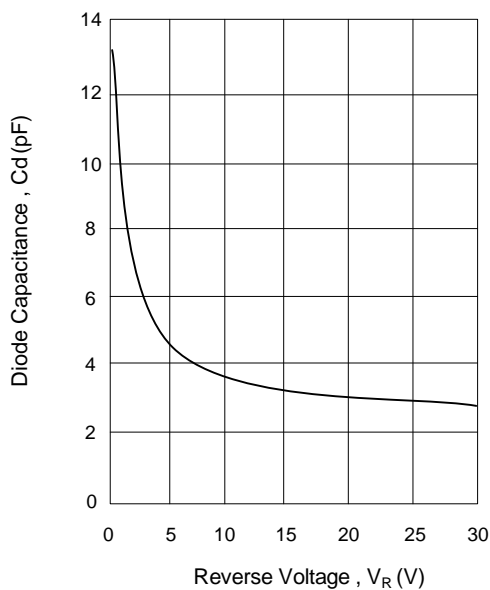
Admissible power dissipation vs. ambient temperature



Typical forward characteristics



Typical diode capacitance as a function of reverse voltage



Typical reverse characteristics

