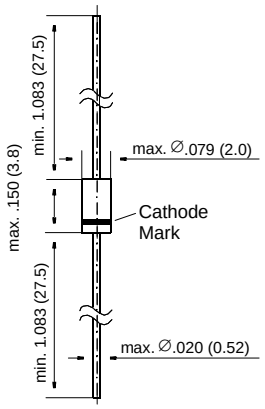
BAT85

Schottky Diodes

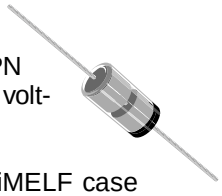
DO-35



Dimensions in inches and (millimeters)

FEATURES

- For general purpose applications.
- This diode features low turn-on voltage. The devices are 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. 0.13 g

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	30	V
Forward Continuous Current at T_{amb} = 25 °C	I_F	200[1)]	mA
Peak Forward Current at T_{amb} = 25 °C	I_{FM}	300[1)]	mA
Surge Forward Current at t_p < 1 s, T_{amb} = 25 °C	I_{FSM}	600[1)]	mA
Power Dissipation at T_{amb} = 65 °C	P_{tot}	200[1)]	mW
Junction Temperature	T_j	125	°C
Ambient Operating Temperature Range	T_{amb}	–65 to +125	°C
Storage Temperature Range	T_S	–65 to +150	°C

[1)] Valid provided that leads at a distance of 4 mm from case are kept at ambient temperature.

GENERAL SEMICONDUCTOR®

BAT85

ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage tested with 10 μA Pulses	$V_{(BR)R}$	30	–	–	V
Forward Voltage Pulse Test t_p < 300 μs, δ < 2% at I_F = 0.1 mA at I_F = 1 mA at I_F = 10 mA at I_F = 30 mA at I_F = 100 mA	 V_F V_F V_F V_F V_F	 – – – – –	 – – – 0.5 –	 0.24 0.32 0.4 – 0.8	 V V V V V
Leakage Current at V_R = 25 V	I_R	–	–	2	μA
Capacitance at V_R = 1 V, f = 1 MHz	C_{tot}	–	–	10	pF
Thermal Resistance Junction to Ambient Air	R_{thJA}	–	–	0.43[1)]	K/mW
Reverse Recovery Time from I_F = 10 mA to I_R = 10 mA to I_R = 1 mA	t_{rr}	–	–	5	ns

[1)] Valid provided that leads at a distance of 4 mm from case are kept at ambient temperature.