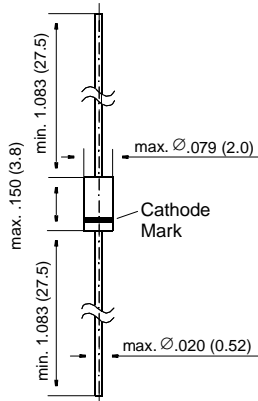


BAT85

Schottky Diodes

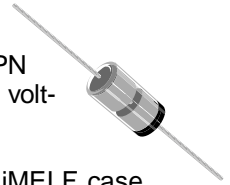
DO-35



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 $T_{amb} = 25\text{ °C}$	I_F	200 ¹⁾	mA
Peak Forward Current at $T_{amb} = 25\text{ °C}$	I_{FM}	300 ¹⁾	mA
Surge Forward Current at $t_p < 1\text{ s}$, $T_{amb} = 25\text{ °C}$	I_{FSM}	600 ¹⁾	mA
Power Dissipation at $T_{amb} = 65\text{ °C}$	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.

BAT85

ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

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

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