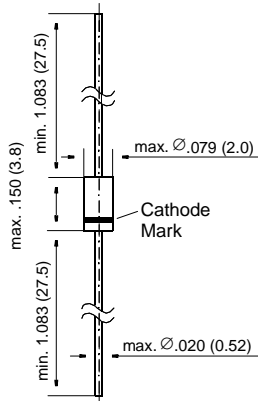


# BAT85

## Schottky Diodes

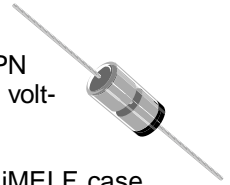
### DO-35



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 $T_{amb} = 25 \text{ }^\circ\text{C}$	$I_F$	200 <sup>1)</sup>	mA
Peak Forward Current at $T_{amb} = 25 \text{ }^\circ\text{C}$	$I_{FM}$	300 <sup>1)</sup>	mA
Surge Forward Current at $t_p < 1 \text{ s}$ , $T_{amb} = 25 \text{ }^\circ\text{C}$	$I_{FSM}$	600 <sup>1)</sup>	mA
Power Dissipation at $T_{amb} = 65 \text{ }^\circ\text{C}$	$P_{tot}$	200 <sup>1)</sup>	mW
Junction Temperature	$T_j$	125	$^\circ\text{C}$
Ambient Operating Temperature Range	$T_{amb}$	-65 to +125	$^\circ\text{C}$
Storage Temperature Range	$T_S$	-65 to +150	$^\circ\text{C}$

<sup>1)</sup> 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 $\mu$ 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	$\mu$ 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 <sup>1)</sup>	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

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