

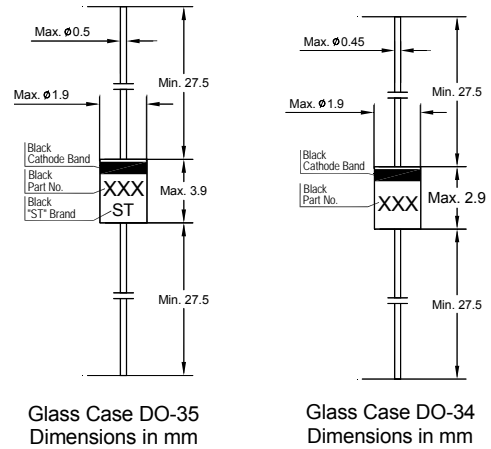
# BAT85

## SCHOTTKY BARRIER DIODE

Ultra high-speed switching, switching, voltage clamping protection circuits and blocking applications

### Features

- Low forward voltage
- Hermetically-sealed leaded glass package

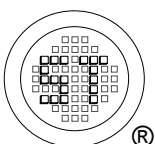


### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Continuous Reverse Voltage	$V_R$	30	V
Continuous Forward Current	$I_F$	200	mA
Average Forward Current	$I_{F(AV)}$	200	mA
Repetitive Peak Forward Current	$I_{FRM}$	300	mA
Non-Repetitive Peak Forward Current	$I_{FSM}$	5	A
Thermal Resistance from Junction to Ambient	$R_{thja}$	320	K/W
Operating Ambient Temperature	$T_{amb}$	- 65 to + 125	$^\circ\text{C}$
Junction Temperature	$T_J$	125	$^\circ\text{C}$
Storage Temperature Range	$T_S$	- 65 to + 150	$^\circ\text{C}$

### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage			
at $I_F = 0.1\text{ mA}$	$V_F$	240	mV
at $I_F = 1\text{ mA}$	$V_F$	320	mV
at $I_F = 10\text{ mA}$	$V_F$	400	mV
at $I_F = 30\text{ mA}$	$V_F$	500	mV
at $I_F = 100\text{ mA}$	$V_F$	800	mV
Reverse Current			
at $V_R = 25\text{ V}$	$I_R$	2	$\mu\text{A}$
Diode Capacitance			
at $V_R = 1\text{ V}$ , $f = 1\text{ MHz}$	$C_d$	10	pF
Reverse Recovery Time			
at $I_F = 10\text{ mA}$ , $I_R = 10\text{ mA}$ , $R_L = 100\ \Omega$	$t_{rr}$	4	ns



**SEMTECH ELECTRONICS LTD.**

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ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001:2004  
Certificate No. 7116



ISO 9001:2000  
Certificate No. 0506098

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