

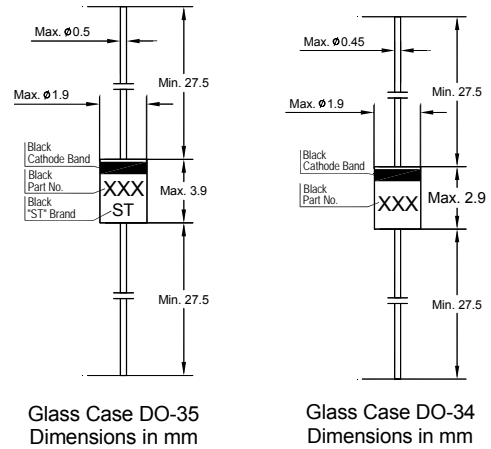
BAT85

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_{Stg}	- 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	μA
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