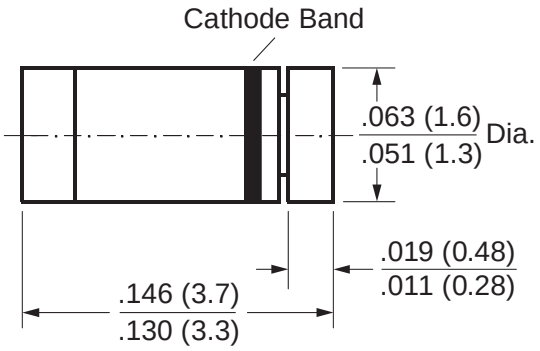
Schottky Diode

MiniMELF (SOD-80C)



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 a DO-35 case with type designation BAT85.

Mechanical Data

Case: MiniMELF Glass Case (SOD-80C)
Weight: approx. 0.05g

Maximum Ratings and Thermal Characteristics (T_A = 25°C unless otherwise noted)

Parameter	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 < 1s, T_{amb} = 25°C	I_{FSM}	600(1)	mA
Power Dissipation at T_{amb} = 65°C	P_{tot}	200(1)	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	430(1)	°C/W
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_S	–55 to +150	°C

Electrical Characteristics (T_J = 25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	I_R = 10µA (pulsed)	30	—	—	V
Leakage Current	I_R	V_R = 25V	—	0.2	2	µA
Forward Voltage	V_F	Pulse Test tp < 300µs I_F = 0.1mA I_F = 1mA I_F = 10mA I_F = 30mA I_F = 100mA	 — — — — —	 — — — 0.5 —	 0.24 0.32 0.4 — 0.8	V
Capacitance	C_{tot}	V_R = 1V, f = 1MHz	—	—	10	pF
Reverse Recovery Time	t_{rr}	I_F = 10mA, I_R = 10mA I_R = 1mA	—	—	5	ns

Note: (1) Valid provided that electrodes are kept at ambient temperature.