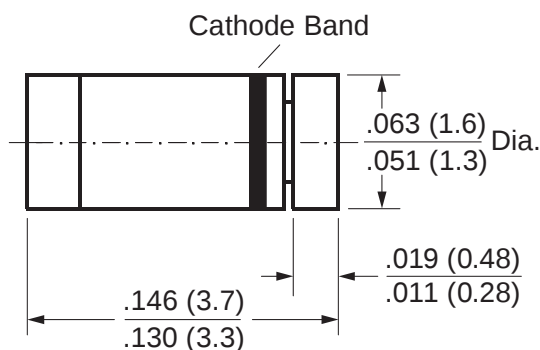


Schottky Diode

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**Cathode Band Color:** Green**Packaging Codes/Options:**

D1/10K per 13" reel (8mm tape), 20K/box

D2/2.5K per 7" reel (8mm tape), 20K/box

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 _{θJA}	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 t _p < 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.