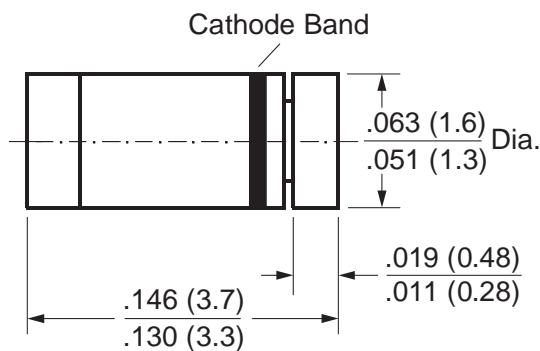


Schottky Diode

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 ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	30	V
Forward Continuous Current at $T_{amb} = 25^\circ\text{C}$	I_F	200 ⁽¹⁾	mA
Peak Forward Current at $T_{amb} = 25^\circ\text{C}$	I_{FM}	300 ⁽¹⁾	mA
Surge Forward Current at $t_p < 1\text{s}$, $T_{amb} = 25^\circ\text{C}$	I_{FSM}	600 ⁽¹⁾	mA
Power Dissipation at $T_{amb} = 65^\circ\text{C}$	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 ($T_j = 25^\circ\text{C}$ unless otherwise noted)

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

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