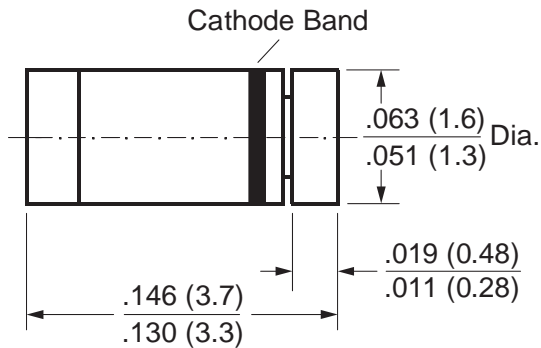


Schottky Diode

Features

- For general purpose applications
- This diode features low turn-on voltage and high break-down voltage. This device is protected by a PN junction guarding against excessive voltage, such as electrostatic discharges.
- This diode is also available in the DO-35 case with type designation BAT46 and in the SOD-123 case with type designation BAT46W.

MiniMELF (SOD-80C)


Dimensions in inches and (millimeters)

Mechanical Data

Case: MiniMELF Glass Case (SOD-80)

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 & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	100	V
Forward Continuous Current at T _{amb} = 25°C	I _F	150 ⁽¹⁾	mA
Repetitive Peak Forward Current at t _p < 1s, δ < 0.5, T _{amb} = 25°C	I _{FRM}	350 ⁽¹⁾	mA
Surge Forward Current at t _p < 10ms, T _{amb} = 25°C	I _{FSM}	750 ⁽¹⁾	mA
Power Dissipation at T _{amb} = 80°C	P _{tot}	200 ⁽¹⁾	mW
Thermal Resistance Junction to Ambient Air	R _{θJA}	0.3 ⁽¹⁾	°C/mW
Junction Temperature	T _j	125	°C
Ambient Operating Temperature Range	T _{amb}	-55 to +125	°C
Storage Temperature Range	T _s	-65 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}	100μA pulses	100	—	—	V
Leakage Current Pulse Test t _p = 300μs, δ < 2%	I _R	V _R = 1.5V V _R = 1.5V, T _j = 60°C V _R = 10V V _R = 10V, T _j = 60°C V _R = 50V V _R = 50V, T _j = 60°C V _R = 75V V _R = 75V, T _j = 60°C	—	—	0.5 5 0.8 7.5 2 15 5 20	μA
Forward Voltage Pulse Test t _p < 300μs, δ < 2%	V _F	I _F = 0.1mA I _F = 10mA I _F = 250mA	—	—	0.25 0.45 1	V
Capacitance	C _{tot}	V _R = 0V, f = 1MHz V _R = 1V, f = 1MHz	—	10 6	—	pF

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