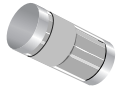
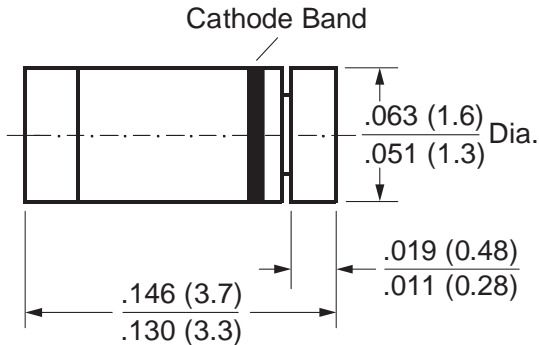




Schottky Diode



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.
- Metal-on-silicon Schottky barrier device which is protected by a PN junction guard ring.
- The low forward voltage drop and fast switching make it ideal for protection of MOS devices, steering, biasing and coupling diodes for fast switching and low logic level applications
- This diode is also available in a DO-35 case with type designation BAT86.

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	50	V
Forward Continuous Current at T _{amb} = 25°C	I _F	200 ⁽¹⁾	mA
Repetitive Forward Current at t _p < 1s, v ≤ 0.5, T _{amb} = 25°C	I _{FRM}	500 ⁽¹⁾	mA
Power Dissipation at T _{amb} = 25°C	P _{tot}	200 ⁽¹⁾	mW
Thermal Resistance Junction to Ambient Air	R _{θJA}	300 ⁽¹⁾	°C/W
Junction Temperature	T _j	125	°C
Ambient Operating Temperature Range	T _{amb}	-65 to +125	°C
Storage Temperature Range	T _s	-65 to +150	°C

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

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)	50	—	—	V
Leakage Current	I_R	$V_R = 25\text{V}$	—	0.2	0.5	μA
Forward Voltage	V_F	Pulse Test $t_p < 300\mu\text{s}$, $\delta < 2\%$	—	—	—	V
		$I_F = 0.1\text{mA}$	—	0.200	0.300	
		$I_F = 1\text{mA}$	—	0.275	0.380	
		$I_F = 10\text{mA}$	—	0.365	0.450	
		$I_F = 30\text{mA}$	—	0.460	0.600	
		$I_F = 100\text{mA}$	—	0.700	0.900	
Capacitance	C_{tot}	$V_R = 1\text{V}$, $f = 1\text{MHz}$	—	—	8	pF
Reverse Recovery Time	t_{rr}	$I_F = 10\text{mA}$, $I_R = 10\text{mA}$ $I_R = 1\text{mA}$	—	—	5	ns