

BAS86

FEATURES :

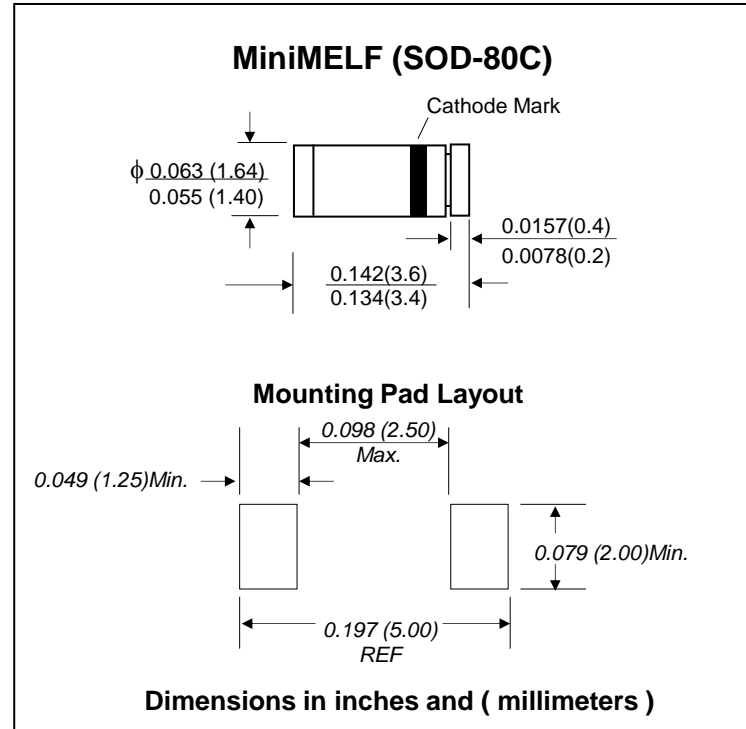
- For general purpose applications.
- This diode features low turn-on voltage. This device is protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges.
- Metal-on-silicon Schottky barrier device which is protected by a PN junction guard ring.
- The low forward 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 the DO-35 case with type designation BAT86.
- **Pb / RoHS Free**

MECHANICAL DATA :

Case: MiniMELF Glass Case (SOD-80C)

Weight: approx. 0.05g

SCHOTTKY BARRIER DIODE



Maximum Ratings and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	50	V
Continuous Forward Current	I_F	200 ⁽¹⁾	mA
Repetitive Peak Forward Current at $t_p < 1s$,	I_{FRM}	500 ⁽¹⁾	mA
Power Dissipation	P_D	200 ⁽¹⁾	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	300 ⁽¹⁾	°C/W
Junction Temperature	T_J	125	°C
Ambient Operating Temperature Range	T_a	-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
Reverse Current	I_R	$V_R = 40 \text{V}$	-	-	5.0	μA
Forward Voltage	V_F	$I_F = 1\text{mA}$	-	0.275	0.380	V
Pulse Test $t_p < 300\mu\text{s}$, $\delta < 2\%$		$I_F = 10\text{mA}$	-	0.365	0.450	
		$I_F = 30\text{mA}$	-	0.460	0.600	
		$I_F = 100\text{mA}$	-	0.700	0.900	
Diode Capacitance	C_d	$V_R = 1\text{V}$, $f = 1\text{MHz}$	-	-	8	pF
Reverse Recovery Time	T_{rr}	$I_F = 10\text{mA}$ to $I_R = 10\text{mA}$, measured at $I_R = 1\text{mA}$	-	-	5	ns