

BAS85

FEATURES :

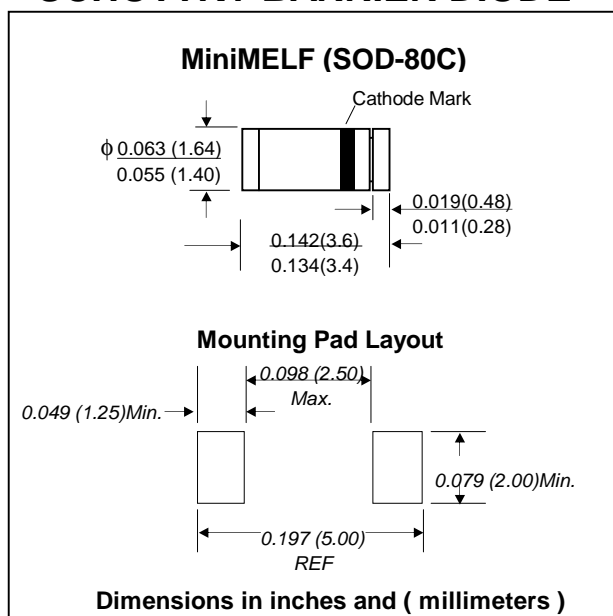
- * For general purpose applications.
- * This diode features low turn-on voltage.
- * This device is protected by a PN junction guard guard ring against excessive voltage, such as electrostatic discharges
- * This diode is also available in the DO-35 case with type designation BAT85.
- * **Pb / RoHS 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	30	V
Continuous Forward Current	I_F	200 ⁽¹⁾	mA
Peak Forward Current	I_{FM}	300 ⁽¹⁾	mA
Forward Surge Current (tp < 1s, T _{amb} = 25 °C)	I_{FSM}	600 ⁽¹⁾	mA
Power Dissipation (Infinite Heatsink)	P_D	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_{STG}	-55 to + 150	°C

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

Electrical Characteristics (T_J = 25 °C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 10 \mu A$ (pulsed)	30	-	-	V
Reverse Current	I_R	$V_R = 25 V$	-	0.2	2.0	μA
Forward Voltage	V_F	$I_F = 1mA$	-	-	0.32	V
Pulse Test tp < 300 μs , δ < 2%		$I_F = 10mA$	-	-	0.40	
		$I_F = 30mA$	-	0.5	-	
		$I_F = 100mA$	-	-	0.80	
Diode Capacitance	C_d	$V_R = 1V, f = 1MHz$	-	-	10	pF
Reverse Recovery Time	T_{rr}	$I_F = 10mA$ to $I_R = 10mA$, measured at $I_R = 1mA$	-	-	5	ns

RATINGS AND CHARACTERISTIC CURVES (BAS85)

FIG.1 - MAXIMUM REVERSE POWER DISSIPATION VS. JUNCTION TEMPERATURE

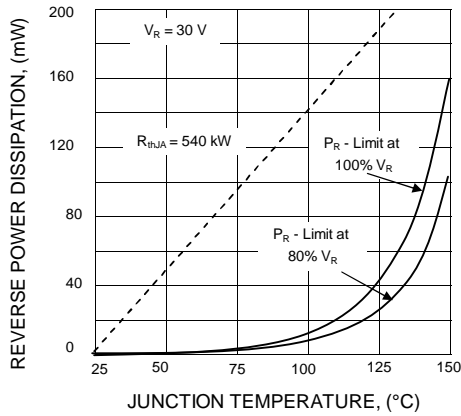


FIG.2 - DIODE CAPACITANCE VS. REVERSE VOLTAGE

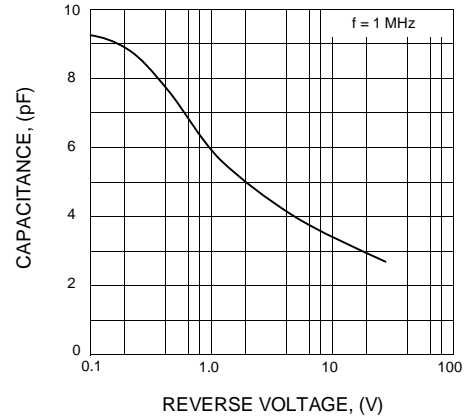


FIG.3 - FORWARD CURRENT VS. FORWARD VOLTAGE

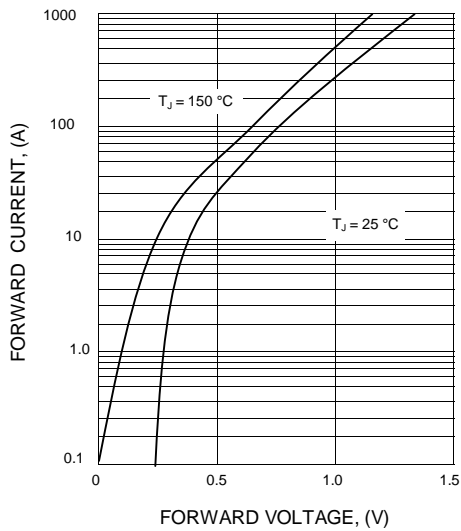


FIG.4 - REVERSE CURRENT VS. JUNCTION TEMPERATURE

