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BAS85

SCHOTTKY BARRIER DIODE

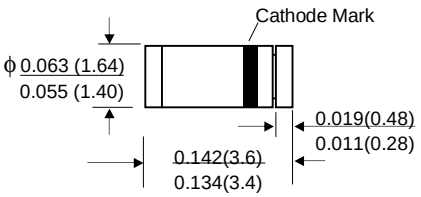
FEATURES :

* For general purpose applications.
* This diode features low turn-on voltage.
* This device isprotected 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

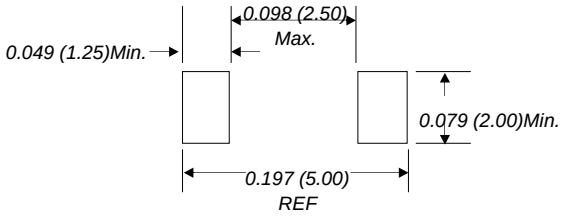
MECHANICAL DATA :

Case: MiniMELF Glass Case (SOD-80C)
Weight: approx. 0.05g

MiniMELF (SOD-80C)



Mounting Pad Layout



Dimensions in inches and (millimeters)

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)	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 (Ta = 25 °C unless otherwise noted)

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

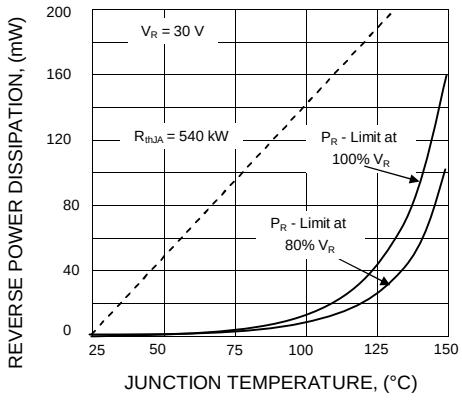


FIG.2 - DIODE CAPACITANCE VS. REVERSE VOLTAGE

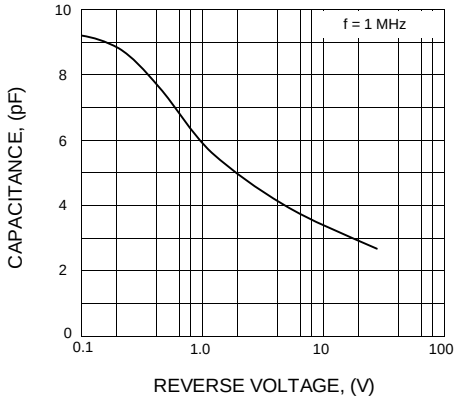


FIG.3 - FORWARD CURRENT VS. FORWARD VOLTAGE

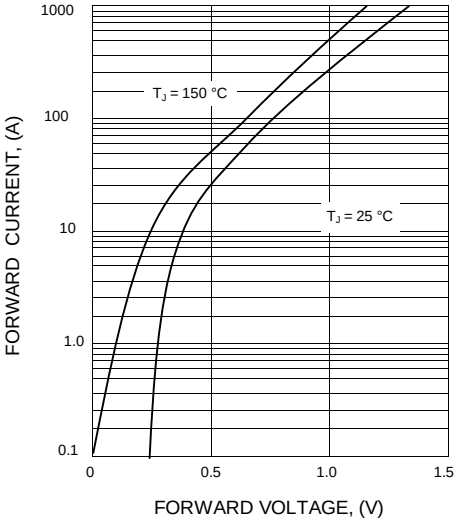


FIG.4 - REVERSE CURRENT VS. JUNCTION TEMPERATURE

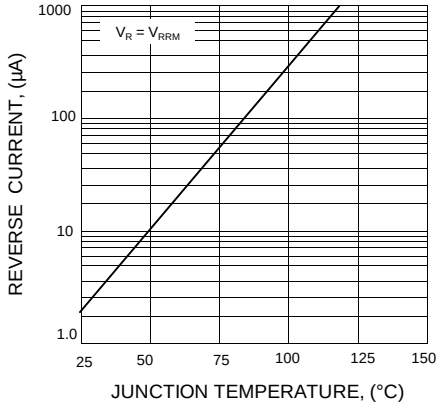


FIG.5 - REVERSE CURRENT VS. REVERSE VOLTAGE; TYPICAL VALUES