SYNSEMI SEMICONDUCTOR

LL41

SCHOTTKY BARRIER DIODE

V_{RRM} : 100V

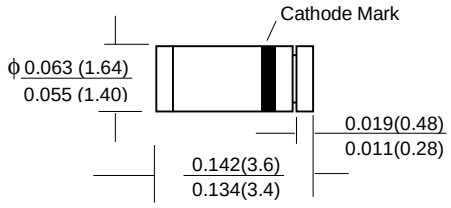
FEATURES :

- For general purpose applications
- This diode features low turn-on voltage and high breakdown voltage. This device is protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges
- This diode is also available in the DO-35 case with type designation BAT41.
- Pb / RoHS Free

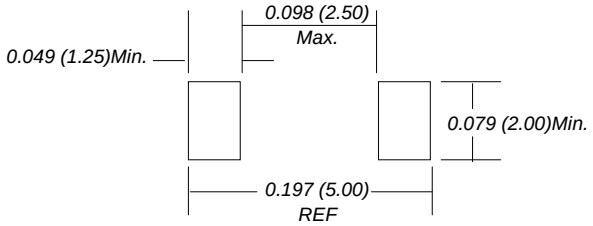
MECHANICAL DATA :

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
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	I_F	100 (1)	mA
Repetitive Peak Forward Current at tp < 1s	I_{FRM}	350 (1)	mA
Forward Surge Current at tp = 10 ms,	I_{FSM}	750 (1)	mA
Power Dissipation	P_D	400(1)	W
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	300(1)	°C/W
Junction Temperature	T_J	125	°C
Ambient Operating Temperature Range	Ta	-65 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 (2)	$V_{(BR)R}$	I_R = 100 µA	100	110	-	V
Reverse Current (2)	I_R	V_R = 50 V V_R = 50 V , T_J = 100 °C	- -	- -	100 20	nA µA
Forward Voltage (2)	V_F	I_F = 1mA I_F = 200mA	- -	0.4 -	0.45 1.0	V
Diode Capacitance	Cd	V_R = 1 V, f = 1MHz	-	2	-	pF
Reverse Recovery Time	Trr	I_F = 10mA, I_R = 10mA, to I_R = 1mA , R_L = 100Ω	-	5	-	ns

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

(2) Pulse test, tp = 300µs