

LL42 - LL43

FEATURES :

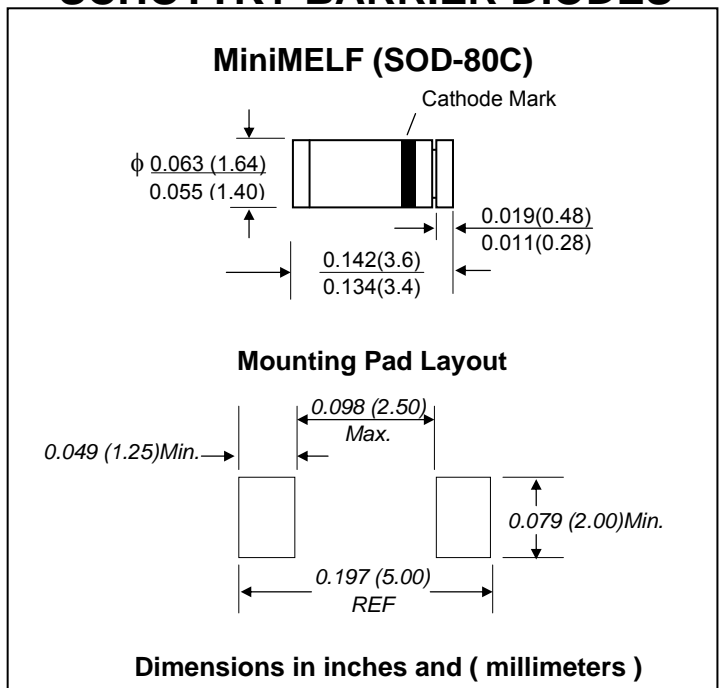
- For general purpose applications.
- This diode features very low turn-on voltage and fast switching. This device is protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges
- These diodes are also available in the DO-35 case with type designations BAT42 to BAT43
- Pb / RoHS Free

MECHANICAL DATA :

Case: MiniMELF Glass Case (SOD-80C)

Weight: approx. 0.05g

SCHOTTKY BARRIER DIODES



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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Continuous Forward Current	I_F	200 ⁽¹⁾	mA
Repetitive Peak Forward Current at $t_p < 1s$,	I_{FRM}	500 ⁽¹⁾	mA
Forward Surge Current at $t_p < 10 ms$,	I_{FSM}	4 ⁽¹⁾	A
Power Dissipation , $T_a = 65\text{ }^\circ\text{C}$	P_D	200 ⁽¹⁾	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	300 ⁽¹⁾	$^\circ\text{C/W}$
Junction Temperature	T_J	125	$^\circ\text{C}$
Ambient Operating Temperature Range	T_a	-55 to + 125	$^\circ\text{C}$
Storage temperature range	T_s	-65 to + 150	$^\circ\text{C}$

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

Electrical Characteristics ($T_J = 25\text{ }^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 100\ \mu\text{A}$ (pulsed)	30	-	-	V
Reverse Current	I_R	$V_R = 25\text{ V}$	-	-	1.0	μA
Pulse Test $t_p < 300\ \mu\text{s}$, $\delta < 2\%$		$V_R = 25\text{ V}$, $T_J = 100\text{ }^\circ\text{C}$	-	-	100	
Forward Voltage	V_F	$I_F = 200\text{ mA}$	-	-	1.00	V
		$I_F = 10\text{ mA}$	-	-	0.40	
Pulse Test $t_p < 300\ \mu\text{s}$, $\delta < 2\%$		$I_F = 50\text{ mA}$	-	-	0.65	
		$I_F = 2\text{ mA}$	0.26	-	0.33	
		$I_F = 15\text{ mA}$	-	-	0.45	
Diode Capacitance	C_d	$V_R = 1\text{ V}$, $f = 1\text{ MHz}$	-	7	-	pF
Reverse Recovery Time	T_{rr}	$I_F = 10\text{ mA}$, $I_R = 10\text{ mA}$, to $I_R = 1\text{ mA}$, $R_L = 100\ \Omega$	-	-	5	ns