

BAT85

SMALL SIGNAL SCHOTTKY DIODES

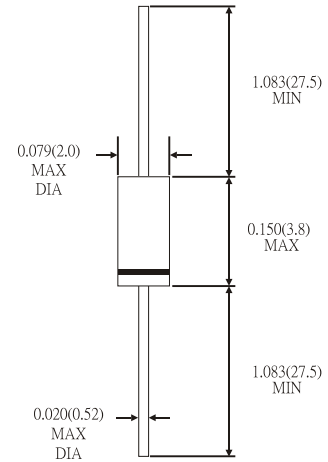
FEATURES

- For general purpose applications
- These diodes features very low turn-on voltage and fast switching. These devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges.
- This diode is also available in the Mini-MELF case with type designation LL85.in the Micro-MELF case with type designation MCL85

MECHANICAL DATA

- Case : DO-35 glass case
- Polarity: color band denotes cathode end
- Weight : Approx. 0.13 gram

DO-35



ABSOLUTE RATINGS(LIMITING VALUES)

Dimensions in inches and (millimeters)

	<i>Symbols</i>	<i>Value</i>	<i>Units</i>
Repetitive Peak Reverse Voltage	V_R	30	V
Forward Continuous Current at $T_A=25^\circ\text{C}$	I_F	200 ¹⁾	mA
Repetitive Peak Forward Current at $t_p < 1\text{s}$, $\delta < 0.5$, $T_A=25^\circ\text{C}$	I_{FM}	300 ¹⁾	mA
Surge forward current at $t_p < 10\text{ms}$, $T_A=25^\circ\text{C}$	I_{FSM}	600 ¹⁾	mA
Power Dissipation ¹⁾ at $T_A=65^\circ\text{C}$	P_{tot}	200 ¹⁾	mW
Junction temperature	T_J	125	$^\circ\text{C}$
Ambient Operating temperature Range	T_A	-65 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150	$^\circ\text{C}$

1) Valid provided that leads at a distance of 4mm from case are kept at ambient temperature

ELECTRICAL CHARACTERISTICS

	<i>Symbols</i>	<i>Min.</i>	<i>Typ.</i>	<i>Max.</i>	<i>Units</i>
Reverse breakdown voltage Tested with 100 μA pulses	$V_{(BR)R}$	30			V
Forward voltage Pulse Test $t_p < 300\mu\text{s}$, $\delta < 2\%$ at $I_F=0.1\text{mA}$, at $I_F=1\text{mA}$, at $I_F=10\text{mA}$, at $I_F=30\text{mA}$, at $I_F=100\text{mA}$	V_F V_F V_F V_F V_F		0.50	0.24 0.32 0.4 0.8	V V V V V
Leakage current $V_R=25\text{V}$	I_R			2	μA
Junction Capacitance at $V_R=1\text{V}$, $f=1\text{MHz}$	C_J			10	pF
Reverse recovery time Form $I_F=10\text{mA}$, $I_R=10\text{mA}$, $t_r=1\text{mA}$	t_{rr}			5	ns
Thermal resistance junction to ambient Air	$R_{\theta JA}$			300 ¹⁾	K/W

1) Valid provided that leads at a distance of 4mm from case are kept at ambient temperature(DO-35)