



SEMICONDUCTOR

BAT85

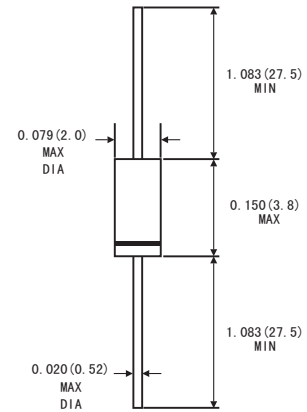
SMALL SIGNAL SCHOTTKY DIODES

## 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 MiniMELF case with type designation LL85.
- High temperature soldering guaranteed :260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU



## DO-35



Dimensions in inches and (millimeters)

## MECHANICAL DATA

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

## ABSOLUTE RATINGS(LIMITING VALUES)

	Symbols	Value	Units
Repetitive Peak Reverse Voltage	$V_R$	30	V
Forward Continuous Current at $T_A=25^\circ\text{C}$	$I_F$	200 <sup>1)</sup>	mA
Repetitive Peak Forward Current at $t_p < 1\text{s}$ , $\delta < 0.5$ , $T_A=25^\circ\text{C}$	$I_{FM}$	300 <sup>1)</sup>	mA
Surge forward current at $t_p < 10\text{ms}$ , $T_A=25^\circ\text{C}$	$I_{FSM}$	5 <sup>1)</sup>	A
Power Dissipation at $T_A=65^\circ\text{C}$	$P_{tot}$	200 <sup>1)</sup>	mW
Junction temperature	$T_J$	125	$^\circ\text{C}$
Ambient Operating temperature Range	$T_A$	-55 to +125	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^\circ\text{C}$

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

## ELECTRICAL CHARACTERISTICS

	Symbols	Min.	Typ.	Max.	Unis
Reverse breakdown voltage Tested with 100 $\mu\text{A}$ 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	$\mu\text{A}$
Junction Capacitance at $V_R=1\text{V}$ , $f=1\text{MHz}$	$C_J$			10	pF
Reverse recovery time Form $I_F=10\text{mA}$ , $I_R=10\text{mA}$ , $I_R=1\text{mA}$	$t_{rr}$			5	ns
Thermal resistance junction to ambient Air	$R_{\theta JA}$			300 <sup>1)</sup>	$^\circ\text{C/W}$

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