



Micro Commercial Components  
 21201 Itasca Street Chatsworth  
 CA 91311  
 Phone: (818) 701-4933  
 Fax: (818) 701-4939

# 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.

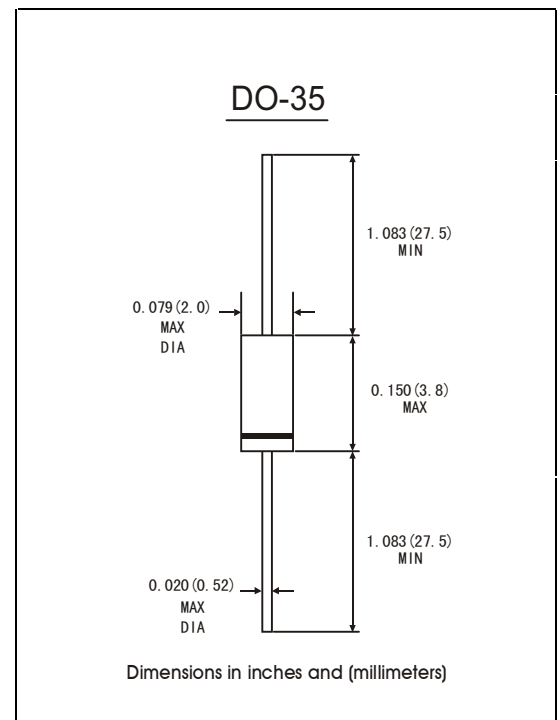
### MECHANICAL DATA

- 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 $T=25^{\circ}\text{C}$	$I_F$	200	mA
Repetitive Peak Forward Current at $t < 1\text{s}$ , $\dot{a} < 0.5$ , $T=25^{\circ}\text{C}$	$I_{FM}$	300	mA
Surge forward current at $t_p < 10\text{ms}$ , $T=25^{\circ}\text{C}$	$I_{FSM}$	600	mA
Power Dissipation at $T=65^{\circ}\text{C}$	$P_{tot}$	200	mW
Junction temperature	$T_J$	125	$^{\circ}\text{C}$
Ambient Operating temperature Range	$T_A$	-55~+125	$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	-55~+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.	Units
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>	K/W

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