

# BAT85

## SMALL SIGNAL SCHOTTKY DIODES

### Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- 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.
- Moisture Sensitivity Level 1

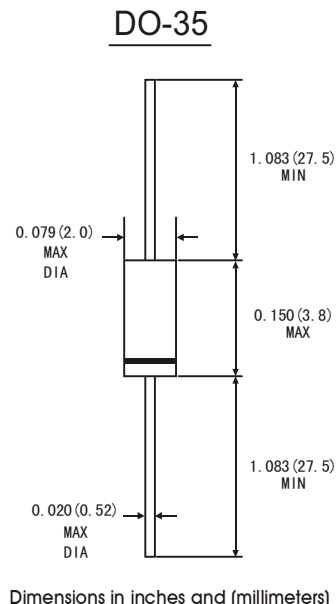
### MECHANICAL DATA

- 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 $t < 1\text{s}$ , $\Delta t < 0.5$ , $T = 25^\circ\text{C}$	$I_{FM}$	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	$T_A$	$-55 \sim +125$	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	$-55 \sim +150$	$^\circ\text{C}$

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 $\mu$ 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)

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 5.

## Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel
Part Number-AP	Ammo Packing: 5Kpcs/Ammo Box
Part Number-BP	Bulk: 100Kpcs/Carton

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