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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

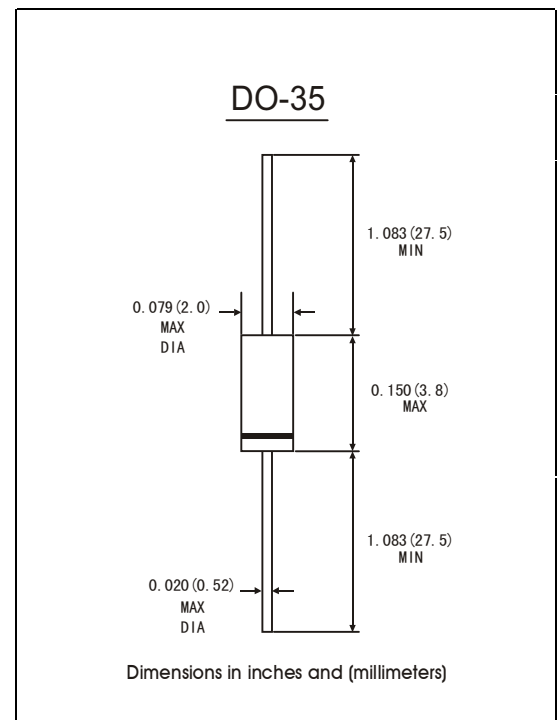
MECHANICAL DATA

- 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 $t < 1\text{s}, \delta < 0.5, T=25^{\circ}\text{C}$	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 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 $I_F=10\text{mA}, I_R=10\text{mA}, I_R=1\text{mA}$	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)

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