



Micro Commercial Components
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BAT86

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.
- These diode is also available in the Mini-MELF case with type designation LL86
- Metal-on-silicon Schottky barrier device which is protected by a PN junction guard ring. The low forward voltage drop and fast switching make it ideal for protection of MOS devices, and low logic applications.

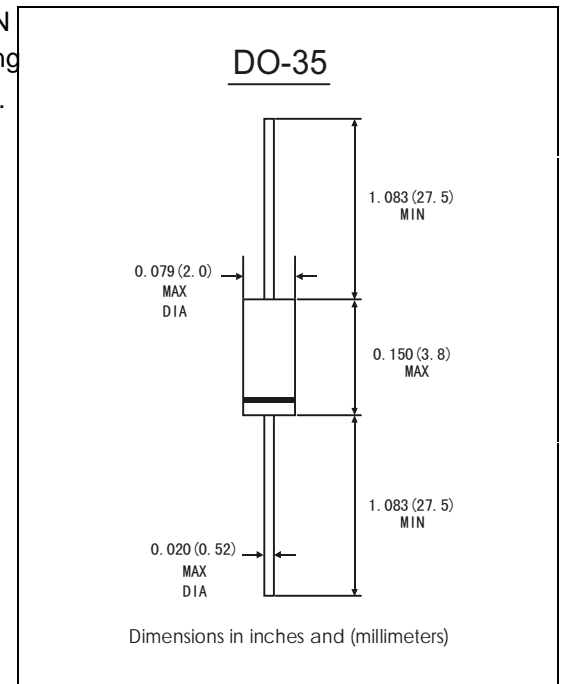
MECHANICAL DATA

- 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	50	V
Forward Continuous Current at $T = 25^\circ\text{C}$	I_F	200 ¹⁾	mA
Repetitive Peak Forward Current at $t < 1\text{s}, \Delta t < 0.5, T_A = 25^\circ\text{C}$	I_{FRM}	300 ¹⁾	mA
Power Dissipation 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	-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 10 μ A pulses	$V_{(BR)R}$	50			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		0.200 0.272 0.365 0.460 0.700	0.300 0.380 0.450 0.600 0.900	V V V V V
Leakage current $V_R = 25\text{V}$	I_R		0.2	0.5	μA
Junction Capacitance at $V_R = 1\text{V}, f = 1\text{MHz}$	C_J			8	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)