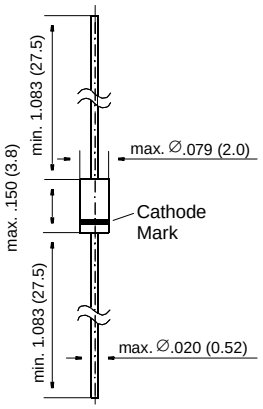
BAT41

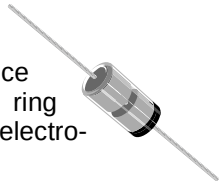
Schottky Diodes

DO-35



Dimensions in inches and (millimeters)

FEATURES



- For general purpose applications
- This diode featutres low turn-on voltage and high breakdown voltage. This device is protected by a PN junction guard ring against excessive voltage, such as electro-static discharges.
- This diode is also available in a MiniMELF case with type designation LL41.

MECHANICAL DATA

Case: DO-35 Glass Case
Weight: approx. 0.13 g

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Forward Continuous Current at T_{amb} = 25 °C	I_F	100[1)]	mA
Repetitive Peak Forward Current at t_p < 1 s, @ < 0.5, T_{amb} = 25 °C	I_{FRM}	350[1)]	mA
Surge Forward Current at t_p = 10 ms, T_{amb} = 25 °C	I_{SFM}	750[1)]	mA
Power Dissipation, T_{amb} = 25 °C	P_{tot}	400[1)]	mW
Junction Temperature	T_j	125	°C
Ambient Operating Temperature Range	T_{amb}	–65 to +125	°C
Storage Temperature Range	T_S	–65 to +150	°C

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

GENERAL SEMICONDUCTOR®

BAT41

ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

Test Conditions	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage tested with 100 µA / 300 µs Pulses	$V_{(BR)R}$	100	110	–	V
Forward Voltage Pulse Test t_p = 300 µs at I_F = 1 mA at I_F = 200 mA	 V_F V_F	 – –	 0.40 –	 0.45 1.0	 V V
Leakage Current Pulse Test t_p = 300 µs at V_R = 50 V, at T_j = 25 °C at V_R = 50 V, at T_j = 100 °C	 I_R I_R	 – –	 – –	 100 20	 nA µA
Capacitance at V_R = 1 V, f = 1 MHz	C_{tot}	–	2	–	pF
Reverse Recovery Time from I_F = 10 mA, to I_R = 10 mA to I_R = 1 mA R_L = 100 Ohm	t_{rr}	–	5	–	ns
Thermal Resistance Junction to Ambient Air	R_{thJA}	–	–	300[1)]	K/W

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