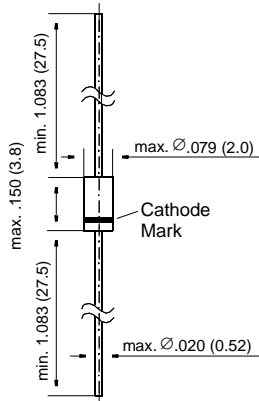


BAT41

Schottky Diodes

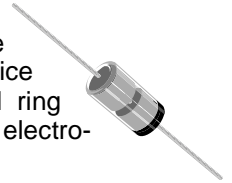
DO-35



Dimensions in inches and (millimeters)

FEATURES

- ◆ For general purpose applications
- ◆ This diode features low turn-on voltage and high breakdown voltage. This device is protected by a PN junction guard ring against excessive voltage, such as electrostatic 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 $T_{amb} = 25\text{ °C}$	I_F	100 ¹⁾	mA
Repetitive Peak Forward Current at $t_p < 1\text{ s}$, @ < 0.5 , $T_{amb} = 25\text{ °C}$	I_{FRM}	350 ¹⁾	mA
Surge Forward Current at $t_p = 10\text{ ms}$, $T_{amb} = 25\text{ °C}$	I_{SFM}	750 ¹⁾	mA
Power Dissipation, $T_{amb} = 25\text{ °C}$	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.

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 μ A / 300 μ s Pulses	$V_{(BR)R}$	100	110	–	V
Forward Voltage Pulse Test $t_p = 300 \mu$ s 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 $t_p = 300 \mu$ s 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 μ A
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.