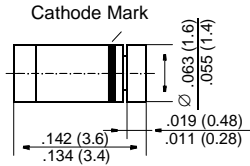


# LL41

## Schottky Diodes

### MiniMELF



Dimensions in inches and (millimeters)

### FEATURES

- ◆ For general purpose applications.
- ◆ This diode features low turn-on voltage and high breakdown voltage. These devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges.
- ◆ This diode is also available in the DO-35 case with type designation BAT41.



### MECHANICAL DATA

**Case:** MiniMELF Glass Case (SOD-80)

**Weight:** approx. 0.05 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 <sup>1)</sup>	mA
Repetitive Peak Forward Current at $t_p < 1\text{ s}$ , @ $< 0.5$ , $T_{amb} = 25\text{ °C}$	$I_{FRM}$	350 <sup>1)</sup>	mA
Surge Forward Current at $t_p = 10\text{ ms}$ , $T_{amb} = 25\text{ °C}$	$I_{SFM}$	750 <sup>1)</sup>	mA
Power Dissipation, $T_{amb} = 25\text{ °C}$	$P_{tot}$	400 <sup>1)</sup>	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

<sup>1)</sup> Valid provided that electrodes are kept at ambient temperature.

# LL41

## ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

Test Conditions	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage tested with 100 $\mu$ A / 300 $\mu$ s Pulses	$V_{(BR)R}$	100	110	–	V
Forward Voltage Pulse Test $t_p = 300 \mu s$ at $I_F = 1 \text{ mA}$ at $I_F = 200 \text{ mA}$	$V_F$ $V_F$	– –	0.40 –	0.45 1.0	V V
Leakage Current Pulse Test $t_p = 300 \mu s$ at $V_R = 50 \text{ V}$ , at $T_j = 25 \text{ }^\circ\text{C}$ at $V_R = 50 \text{ V}$ , at $T_j = 100 \text{ }^\circ\text{C}$	$I_R$ $I_R$	– –	– –	100 20	nA $\mu$ A
Capacitance at $V_R = 1 \text{ V}$ , $f = 1 \text{ MHz}$	$C_{tot}$	–	2	–	pF
Reverse Recovery Time from $I_F = 10 \text{ mA}$ , to $I_R = 10 \text{ mA}$ to $I_R = 1 \text{ mA}$ $R_L = 100 \text{ Ohm}$	$t_{rr}$	–	5	–	ns
Thermal Resistance Junction to Ambient Air	$R_{thJA}$	–	–	300 <sup>1)</sup>	K/W
<sup>1)</sup> Valid provided that electrodes are kept at ambient temperature.					