

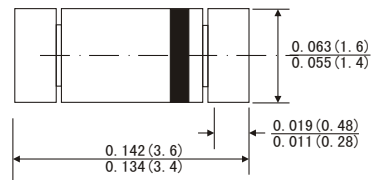
## FEATURES

- For general purpose applications
- This diode features very 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.
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

## MECHANICAL DATA

- Case: MiniMELF glass case(SOD-80)
- Polarity: Color band denotes cathode end
- Weight: Approx. 0.05 gram

### MiniMELF



Dimensions in inches and (millimeters)

## ABSOLUTE RATINGS(LIMITING VALUES)

	Symbols	Value	Units
Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
Forward Continuous Current at $T_A=25^\circ\text{C}$	$I_F$	100 <sup>1)</sup>	mA
Repetitive Peak Forward Current at $t_p < 1\text{s}$ , $\delta < 0.5$ , $T_A=25^\circ\text{C}$	$I_{FRM}$	350 <sup>1)</sup>	mA
Surge forward current at $t_p < 10\text{ms}$ , $T_A=25^\circ\text{C}$	$I_{FSM}$	750 <sup>1)</sup>	mA
Power Dissipation at $T_A=65^\circ\text{C}$	$P_{tot}$	400 <sup>1)</sup>	mW
Junction temperature	$T_J$	125	$^\circ\text{C}$
Ambient Operating temperature Range	$T_A$	-65 to+125	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-65 to+150	$^\circ\text{C}$

1) Valid provided that electrodes are kept at ambient temperature

## ELECTRICAL CHARACTERISTICS

	Symbols	Min.	Typ.	Max.	Units
Reverse breakdown voltage Tested with 100 $\mu\text{A}$ /300ms Pulses	$V_{(BR)R}$	100	110		V
Forward voltage Pulse Test $t_p < 300\mu\text{s}$ at $I_F=1\text{mA}$ , at $I_F=200\text{mA}$	$V_F$ $V_F$			0.45 1.00	V V
Leakage current Pulse Test $t_p < 300\mu\text{s}$ at $V_R=50\text{V}$ at $V_R=50\text{V}, T_J=100^\circ\text{C}$	$I_R$ $I_R$		0.40	100 20	nA $\mu\text{A}$
Junction Capacitance at $V_R=1\text{V}$ , $f=1\text{MHz}$	$C_J$		2		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 <sup>1)</sup>	K/W

1) Valid provided that electrodes are kept at ambient temperature

# RATINGS AND CHARACTERISTIC CURVES LL41

Figure 1. Forward current versus forward voltage at different temperatures (typical values)

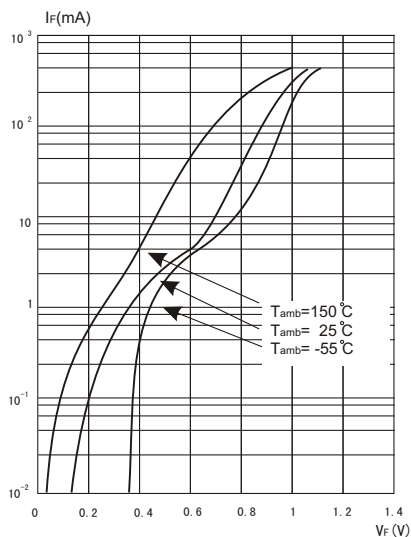


Figure 2. Forward current versus forward voltage (typical values)

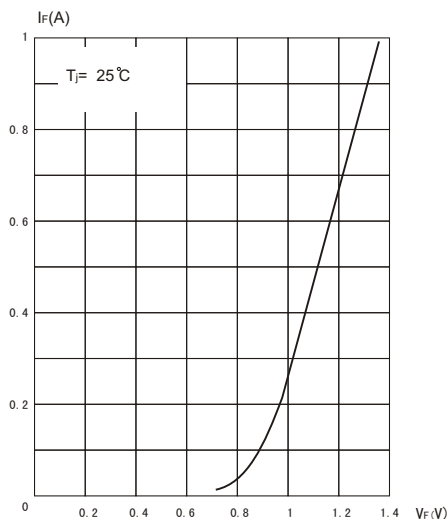


Figure 3. Reverse current versus ambient temperature

