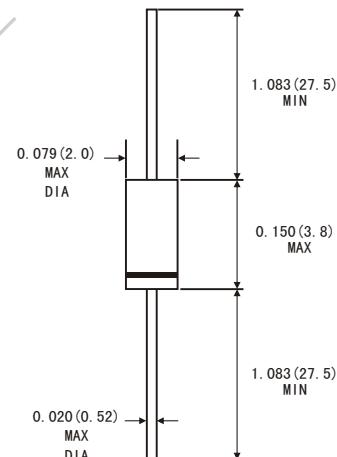


## FEATURES

- 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.
- The diode is also available in the MinMELF case with type designation LL41.
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



## DO-35



## MECHANICAL DATA

- Case: DO-35 glass case
- Polarity: color band denotes cathode end
- Weight: Approx. 0.13 gram

Dimensions in inches and (millimeters)

## ABSOLUTE RATINGS(LIMITING VALUES)

	Symbols	Value	Units
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	100	V
Forward Continuous Current at T <sub>A</sub> =25°C	I <sub>F</sub>	100 <sup>1)</sup>	mA
Repetitive Peak Forward Current at t <sub>p</sub> <1s, δ<0.5 T <sub>A</sub> =25°C	I <sub>FRM</sub>	350 <sup>1)</sup>	mA
Surge Forward Current at t <sub>p</sub> :10ms, T <sub>A</sub> =25°C	I <sub>FSM</sub>	750 <sup>1)</sup>	mA
Power Dissipation at T <sub>A</sub> =65°C	P <sub>tot</sub>	400 <sup>1)</sup>	mW
Junction Temperature	T <sub>J</sub>	125	°C
Ambient Operating Temperature Range	T <sub>A</sub>	-65 to+125	°C
Storage Temperature Range	T <sub>TSG</sub>	-65 to+150	°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 100μA/300μsPulses	V <sub>(BR)R</sub>	100	110		V
Forward voltage Pulse Test t <sub>p</sub> <300μs at I <sub>f</sub> =1mA I <sub>f</sub> =200mA	V <sub>F</sub> V <sub>F</sub>		0.4	0.45 1.0	V V
Leakage current pulse test t <sub>p</sub> <300μs at V <sub>R</sub> =50V,T <sub>J</sub> =25°C at V <sub>R</sub> =50V,T <sub>J</sub> =100°C	I <sub>R</sub> I <sub>R</sub>			100 20	nA μA
Junction Capacitance at V <sub>R</sub> =1V,f=1MHz	C <sub>J</sub>		2		pF
Reverse Recovery Time Form I <sub>f</sub> =10mA,to I <sub>f</sub> =10mA to I <sub>f</sub> =1mA R <sub>L</sub> =100Ω	trr			5	ns
Thermal Resistance Junction to Ambient Air	R <sub>θJA</sub>			300 <sup>1)</sup>	K/W

1) Valid provided that leads at a distance of 4mm from case are kept at ambient temperature(DO-35)

# RATINGS AND CHARACTERISTIC CURVES BAT41

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

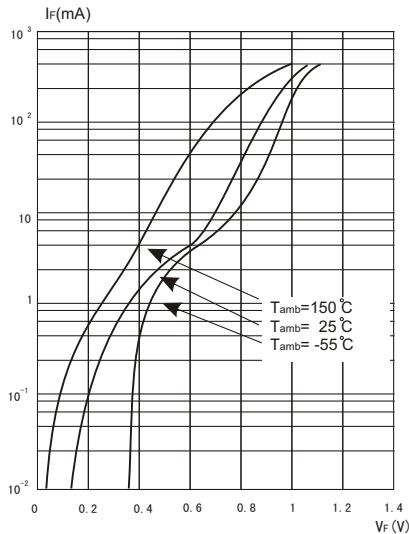


Figure 2. Reverse current versus ambient temperature

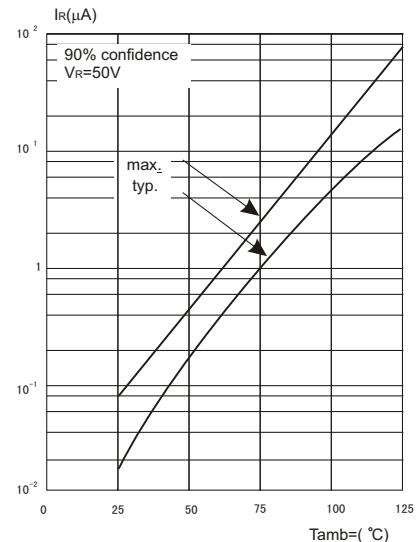
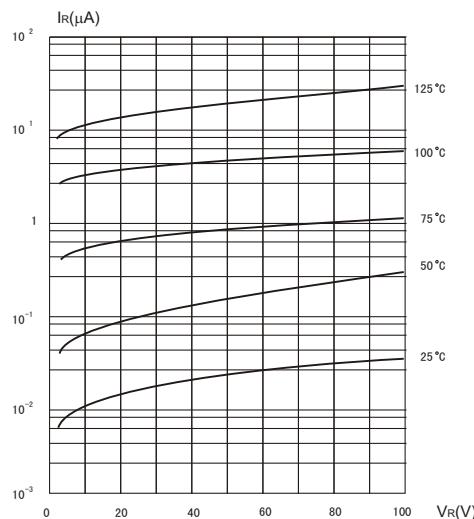


Figure 3. Reverse current versus continuous Reverse voltage(typical values)



# RATINGS AND CHARACTERISTIC CURVES BAT41

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Figure 4. Capacitance  $C_J$  versus reverse applied voltage  $V_R$  (typical values)

