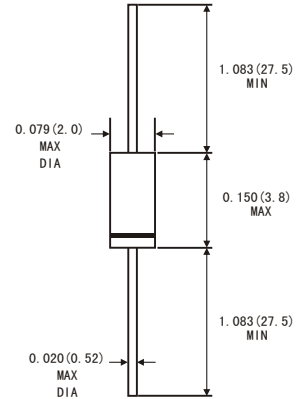


FEATURES

- For general purpose applications
- This diode features very low turn-on voltage and fast switching.
- This device is protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges.
- This diode is also available in the MiniMELF case with the type designation LI48.
- 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

ABSOLUTE RATINGS(LIMITING VALUES)

	Symbols	Value	Units
Repetitive Peak Reverse Voltage	V _{RRM}	40	V
Forward Continuous Current at T _A =25°C	I _F	350 ¹⁾	mA
Repetitive Peak Forward Current at t _p <1s, δ<0.5 T _A =25°C	I _{FRM}	1 ¹⁾	A
Surge forward current at t _p <10ms, T _A =25°C	I _{FSM}	7.5 ¹⁾	A
Power Dissipation at T _A =65°C	P _{tot}	330 ¹⁾	mW
Junction temperature	T _J	125	°C
Ambient Operating temperature Range	T _A	-65 to+125	°C
Storage Temperature Range	T _{STG}	-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.	Unis
Reverse breakdown voltage Tested with 100μA pulses	V(BR) _R	40			V
Forward voltage Pulse Test t _p < 300μs, δ < 2% at I _F =0.1mA, at I _F =10mA, at I _F =250mA	V _F			0.25	V
	V _F			0.40	V
	V _F			0.90	V
Leakage current pulse test t _p < 300μs, δ < 2% at V _R =10V, at V _R =10V, T _J =60°C at V _R =20V, at V _R =20V, T _J =60°C at V _R =40V, at V _R =40V, T _J =60°C	I _R			2	μA
	I _R			15	μA
	I _R			5	μA
	I _R			25	μA
	I _R			25	μA
	I _R			50	μA
Capacitance at V _R =1V, f=1MHz	C _J		12		pF
Thermal resistance junction to ambient Air	R _{θJA}			300 ¹⁾	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 BAT47/BAT48

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

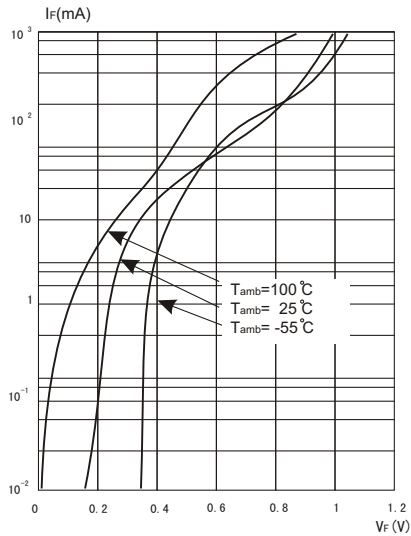


Figure 2. Forward current versus forward voltage (typical values)

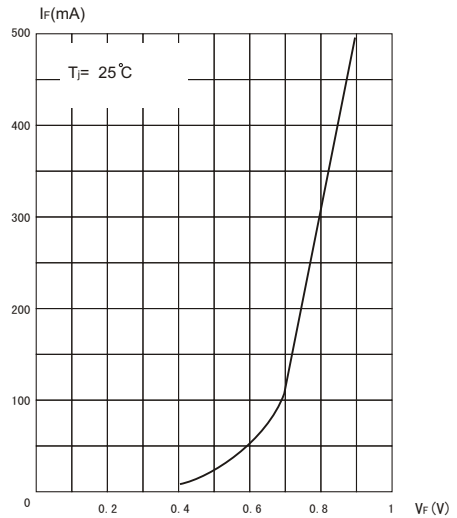
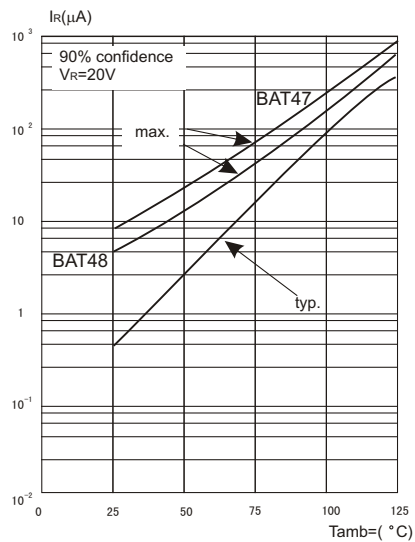


Figure 3. Reverse current versus ambient temperatures



RATINGS AND CHARACTERISTIC CURVES BAT47/ BAT48

Figure 4. Reverse current versus continuous Reverse voltage (typical values)

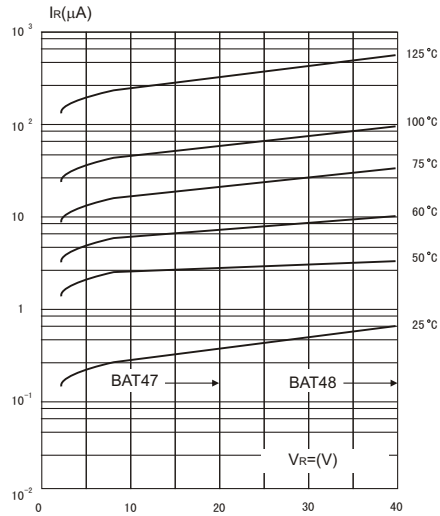


Figure 5. Capacitance C_J versus reverse applied voltage V_R (typical values)

