BAT46

SCHOTTKY BARRIER DIODE

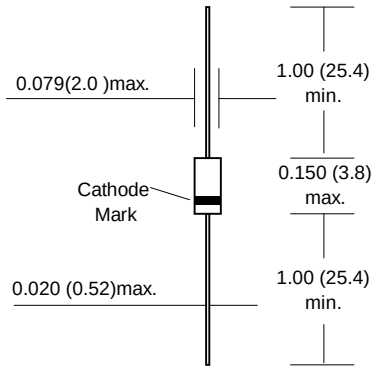
FEATURES :

- 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 type designations LL46.
- Pb / RoHS Free

MECHANICAL DATA :

Case: DO-35 Glass Case
Weight: approx. 0.13g

DO - 35 Glass
(DO-204AH)



Dimensions in inches and (millimeters)

Maximum Ratings and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	I_F	150(1)	mA
Repetitive Peak Forward Current at tp < 1s,	I_{FRM}	350(1)	mA
Forward Surge Current at tp < 10 ms,	I_{FSM}	750(1)	mA
Power Dissipation ,Ta = 65 °C	P_D	150(1)	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	0.3(1)	°C/W
Junction Temperature	T_J	125	°C
Ambient Operating Temperature Range	Ta	-65 to + 125	°C
Storage temperature range	T_S	-65 to + 150	°C

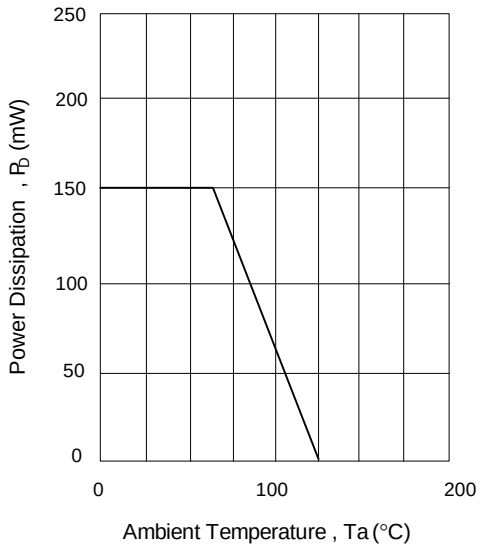
Note: (1) Valid provided that leads at a distance of 4mm from case are kept at ambient temperature.

Electrical Characteristics (T_J = 25°C unless otherwise noted)

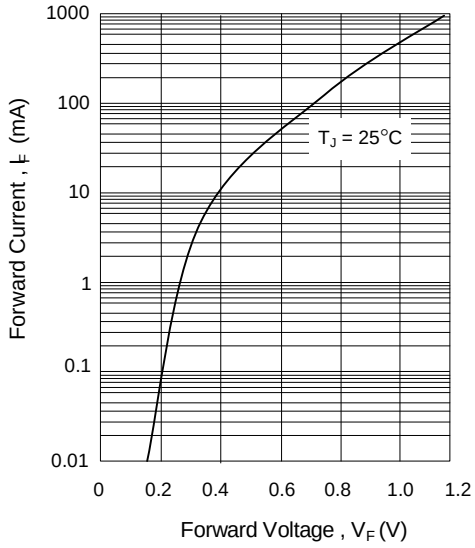
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	I_R = 100 µA (pulsed)	100	-	-	V
Reverse Current Pulse Test tp <300µs , δ <2%	I_R	V_R = 10 V V_R = 50 V V_R = 75 V	- - -	- - -	0.8 2.0 5.0	µA
Forward Voltage Pulse Test tp <300µs , δ <2%	V_F	I_F = 10mA I_F = 250mA	- -	- -	0.45 1.00	V
Diode Capacitance	Cd	V_R = 1V, f = 1MHz	-	6	-	pF

RATING AND CHARACTERISTIC CURVES (BAT46)

Admissible Power Dissipation vs. Ambient Temperature



Typical Forward Characteristics



Typical Reverse Characteristics