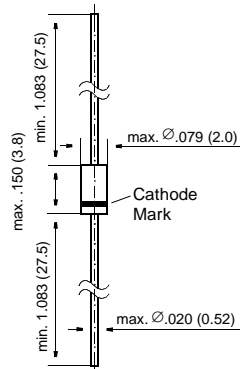


BAT48

Schottky Diodes

DO-35



Dimensions in inches and (millimeters)

FEATURES

- ◆ For general purpose applications.
- ◆ These diodes feature very low turn-on voltage and fast switching. These devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges.
- ◆ This diode is also available in the Mini-MELF case with type designations LL46.



MECHANICAL DATA

Case: DO-35 Glass Case

Weight: approx. 0.13 g

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Forward Continuous Current at $T_{amb} = 25\text{ °C}$	I_F	350 ¹⁾	mA
Repetitive Peak Forward Current at $t_p < 1\text{ s}$, $\delta < 0.5$, $T_{amb} = 25\text{ °C}$	I_{FRM}	1 ¹⁾	A
Surge Forward Current at $t_p < 10\text{ ms}$, $T_{amb} = 25\text{ °C}$	I_{FSM}	7.5 ¹⁾	A
Power Dissipation ¹⁾ at $T_{amb} = 65\text{ °C}$	P_{tot}	330 ¹⁾	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
¹⁾ Valid provided that leads at a distance of 4 mm from case are kept at ambient temperature			

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ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage tested with 100 μ A Pulses	$V_{(BR)R}$	40	–	–	V
Forward Voltage Pulse Test $t_p < 300 \mu s$, $\delta < 2\%$ at $I_F = 0.1$ mA	V_F	–	–	0.25	V
at $I_F = 10$ mA	V_F	–	–	0.40	V
at $I_F = 250$ mA	V_F	–	–	0.90	V
Leakage Current Pulse Test $t_p < 300 \mu s$, $\delta < 2\%$ at $V_R = 10$ V	I_R	–	–	2	μ A
at $V_R = 10$ V, $T_j = 60$ °C	I_R	–	–	15	μ A
at $V_R = 20$ V	I_R	–	–	5	μ A
at $V_R = 20$ V, $T_j = 60$ °C	I_R	–	–	25	μ A
at $V_R = 40$ V	I_R	–	–	25	μ A
at $V_R = 40$ V, $T_j = 60$ °C	I_R	–	–	50	μ A
Capacitance at $V_R = 1$ V, $f = 1$ MHz	C_{tot}	–	12	–	pF
Thermal Resistance Junction to Ambient Air	R_{thJA}	–	–	0.3 ¹⁾	K/mW
¹⁾ Valid provided that leads at a distance of 4 mm from the case are kept at ambient temperature (DO-35)					