



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.
TEL: 2790-0314 FAX: 2790-0206

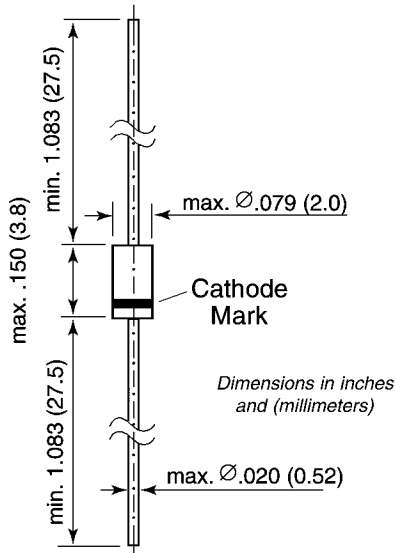
GENERAL
SEMICONDUCTOR®

BAT46

Schottky Diode



DO-204AH (DO-35 Glass)



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 SOD-123 case with type designation BAT46W and in the MiniMELF case with type designations LL46.

Mechanical Data

Case: DO-35 Glass Case

Weight: approx. 0.13g

Packaging Codes/Options:

D7/10K per 13" reel (52mm tape), 20K/box
D8/10K per Ammo tape (52mm tape), 20K/box

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	100	V
Forward Continuous Current at T _{amb} = 25°C	I _F	150 ⁽¹⁾	mA
Repetitive Peak Forward Current at t _p < 1s, δ < 0.5, T _{amb} = 25°C	I _{FRM}	350 ⁽¹⁾	mA
Surge Forward Current at t _p < 10ms, T _{amb} = 25°C	I _{FSM}	750 ⁽¹⁾	mA
Power Dissipation ⁽¹⁾ at T _{amb} = 65°C	P _{tot}	150 ⁽¹⁾	mW
Thermal Resistance Junction to Ambient Air	R _{θJA}	0.3 ⁽¹⁾	°C/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

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 = 100µA (pulsed)	100	—	—	V
Leakage Current Pulse Test t _p < 300µs, δ < 2%	I _R	V _R = 1.5V	—	—	0.5	µA
		V _R = 1.5V, T _j = 60°C	—	—	5	
		V _R = 10V	—	—	0.8	
		V _R = 10V, T _j = 60°C	—	—	7.5	
		V _R = 50V	—	—	2	
		V _R = 50V, T _j = 60°C	—	—	15	
Forward Voltage Pulse Test t _p < 300µs, δ < 2%	V _F	I _F = 0.1mA	—	—	0.25	V
		I _F = 10mA	—	—	0.45	
		I _F = 250mA	—	—	1	
Capacitance	C _{tot}	V _R = 0V, f = 1MHz	—	10	—	pF
		V _R = 1V, f = 1MHz	—	6	—	

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



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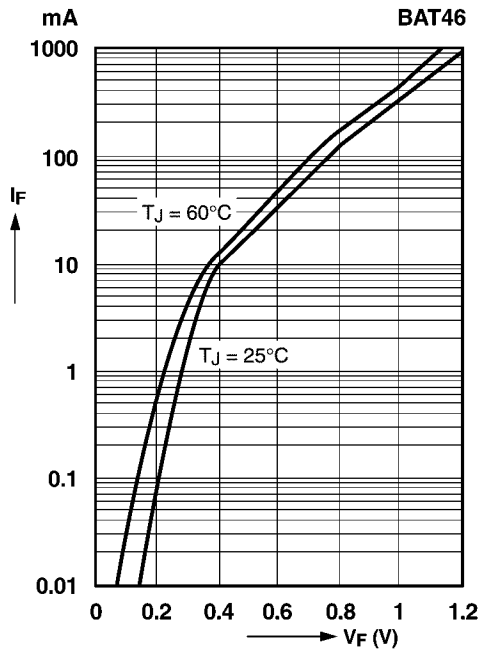
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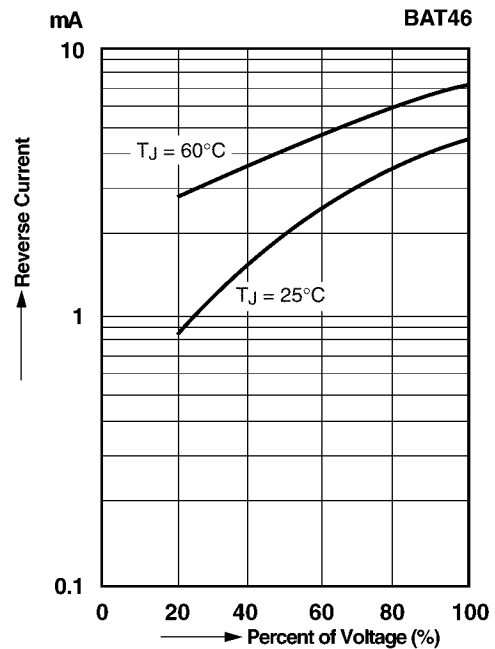
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Ratings and Characteristic Curves

Forward Characteristics



Typical Reverse Characteristics



Admissible Power Dissipation vs. Ambient Temperature

