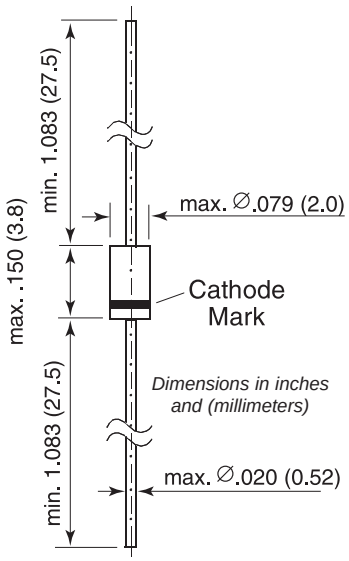
BAT85

Schottky Diode

DO-35 Glass



Features

- For general purpose applications.
- This diode features low turn-on voltage. 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 designation BAS85.

Mechanical Data

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

Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	30	V
Forward Continuous Current at T_{amb} = 25°C	I_F	200(1)	mA
Peak Forward Current at T_{amb} = 25°C	I_{FM}	300(1)	mA
Surge Forward Current at t_p < 1s, T_{amb} = 25°C	I_{FSM}	600(1)	mA
Power Dissipation at T_{amb} = 65°C	P_{tot}	200(1)	mW
Thermal Resistance Juntion to Ambient Air	$R_{\theta JA}$	430(1)	°C/W
Maximum Junction Temperature	T_j	125	°C
Ambient Operating Temperature Range	T_A	–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 = 10µA (pulsed)	30	—	—	V
Leakage Current	I_R	V_R = 25V	—	—	2	µA
Forward Voltage Pulse Test t_p < 300 µs, δ < 2%	V_F	I_F = 0.1mA I_F = 1mA I_F = 10mA I_F = 30mA I_F = 100mA	— — — — —	— — — 0.5 —	0.24 0.32 0.4 — 0.8	V
Capacitance	C_{tot}	V_R = 1V, f = 1MHz	—	—	10	pF
Reverse Recovery Time	t_{rr}	I_F = 10mA to I_R = 10mA to I_R = 1mA	—	—	5	ns

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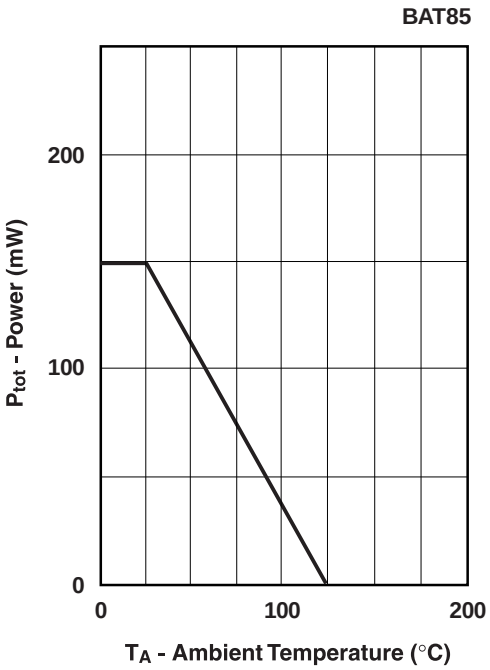
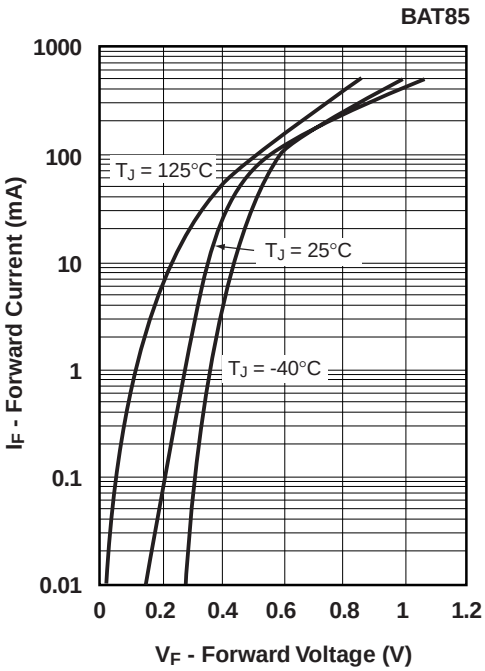
Ratings and Characteristic Curves

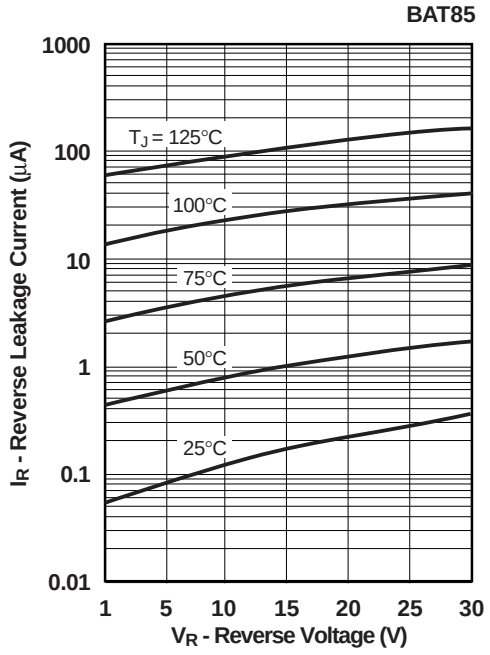
Admissible Power Dissipation vs. Ambient Temperature



Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance