

BAS85

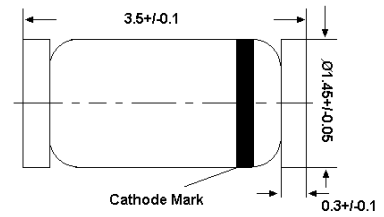
Schottky Barrier Diode

Ultra High-Speed Switching, Voltage Clamping
Protection Circuits and Blocking Applications

Features

- Low forward voltage.
- Guard ring protected.
- Hermetically-sealed leaded glass package.

LL-34



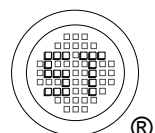
Glass case MiniMELF
Dimensions in mm

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Continuous Reverse Voltage	V_R	30	V
Continuous Forward Current	I_F	200	mA
Average Forward Current	$I_{F(AV)}$	200	mA
Repetitive peak Forward Current	I_{FRM}	300	mA
Non-repetitive Peak Forward Current	I_{FSM}	5	A
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	320	K/W
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 0.1\text{ mA}$ at $I_F = 1\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 30\text{ mA}$ at $I_F = 100\text{ mA}$	V_F	240 320 400 500 800	mV
Reverse Current at $V_R = 25\text{ V}$	I_R	2.3	μA
Reverse Recovery Time at $I_F = 10\text{ mA}$, $I_R = 10\text{ mA}$, $R_L = 100\ \Omega$	t_{rr}	4	ns



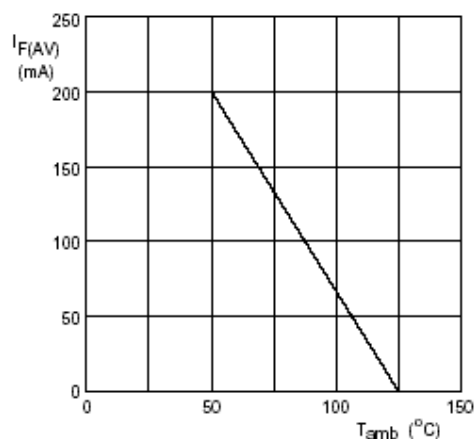
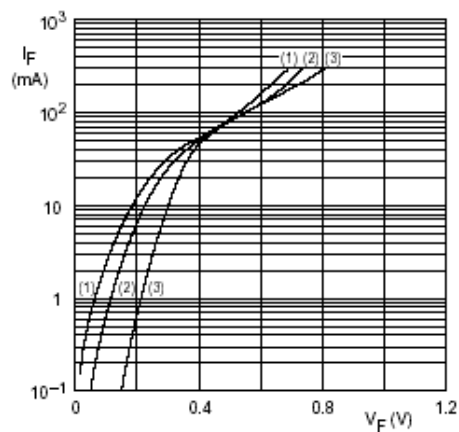
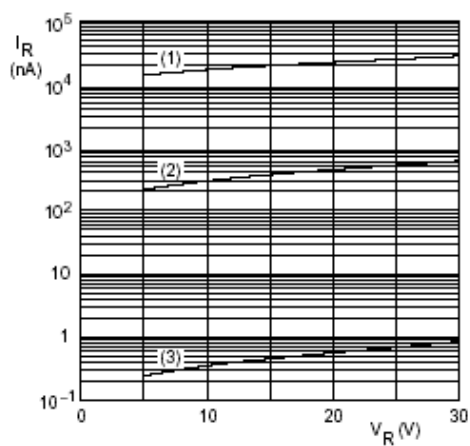


Fig. 1 Derating curve.



- (1) $T_{amb} = 125\text{ }^{\circ}\text{C}$.
- (2) $T_{amb} = 85\text{ }^{\circ}\text{C}$.
- (3) $T_{amb} = 25\text{ }^{\circ}\text{C}$.

Fig. 2 Forward current as a function of forward voltage; typical values.



- (1) $T_{amb} = 85\text{ }^{\circ}\text{C}$.
- (2) $T_{amb} = 25\text{ }^{\circ}\text{C}$.
- (3) $T_{amb} = -40\text{ }^{\circ}\text{C}$.

Fig. 3 Reverse current as a function of reverse voltage; typical values.

