

# BAS85

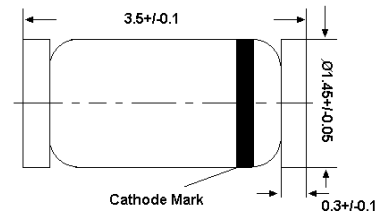
## Schottky Barrier Diode

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



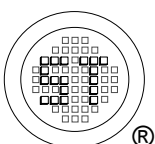
Glass case MiniMELF  
Dimensions in mm

### 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	$^\circ\text{C}$

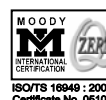
### Characteristics at $T_a = 25^\circ\text{C}$

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	$\mu\text{A}$
Reverse Recovery Time at $I_F = 10\text{ mA}$ , $I_R = 10\text{ mA}$ , $R_L = 100\ \Omega$	$t_{rr}$	4	ns



**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Sino-Tech International Holdings Limited, a company  
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ISO 18949 : 2002  
Certificate No. 06103



ISO 14001 : 2004  
Certificate No. 7116



ISO 9001 : 2008  
Certificate No. 0508098



BS-ONSAS 18001 : 2007  
Certificate No. 7116



IECQ QC 080000  
Certificate No. 06103

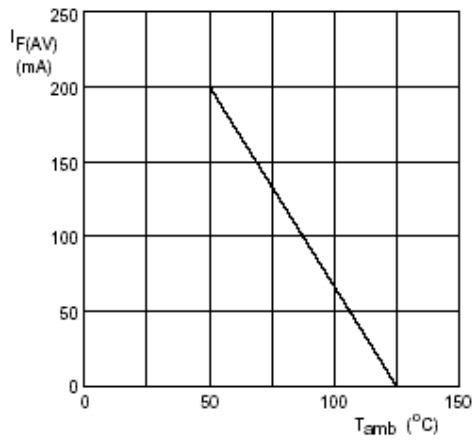
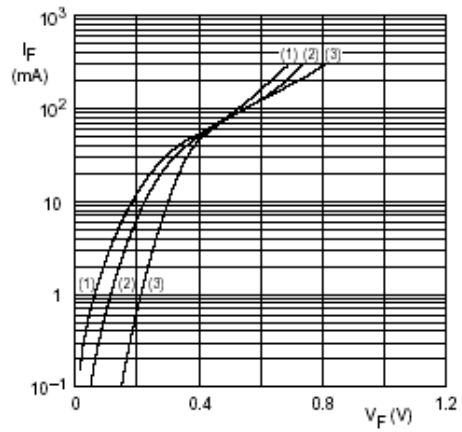
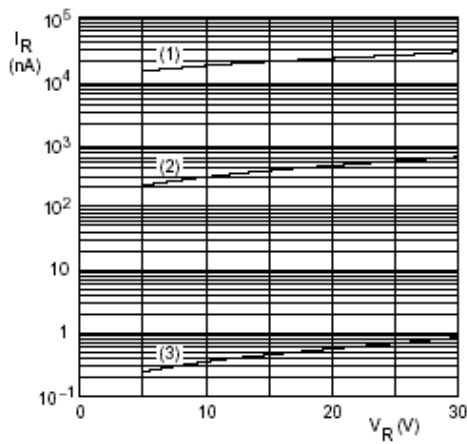


Fig. 1 Derating curve.



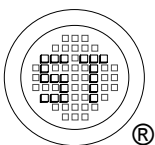
- (1) T<sub>amb</sub> = 125 °C.
- (2) T<sub>amb</sub> = 85 °C.
- (3) T<sub>amb</sub> = 25 °C.

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



- (1) T<sub>amb</sub> = 85 °C.
- (2) T<sub>amb</sub> = 25 °C.
- (3) T<sub>amb</sub> = -40 °C.

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



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