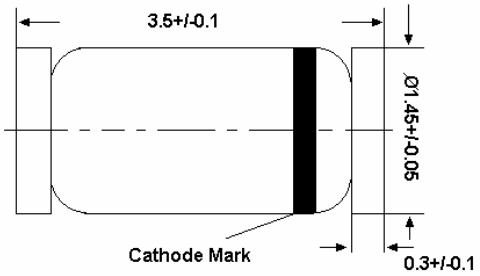
KEEN SIDE electronics

BAS85

SCHOTTKY BARRIER DIODE



Glass case MiniMELF
Dimensions in mm

Features

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

Absolute Maximum Ratings (T_a = 25°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
Operating ambient temperature	T_{amb}	-65 to +125	°C
Junction temperature	T_j	125	°C
Storage temperature range	T_S	-65 to +150	°C
Thermal resistance from junction to ambient	R_{thja}	320	K/W

Characteristics at T_a = 25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit
Forward voltage					
at I_F = 0.1mA	V_F	-	-	240	mV
at I_F = 1mA	V_F	-	-	320	mV
at I_F = 10mA	V_F	-	-	400	mV
at I_F = 30mA	V_F	-	-	500	mV
at I_F = 100mA	V_F	-	-	800	mV
Reverse current					
at V_R = 25V	I_R	-	-	2.3	µA
Reverse recovery time					
at I_F = 10mA, I_R = 10mA, R_L = 100Ω	t_{rr}	-	-	4	ns

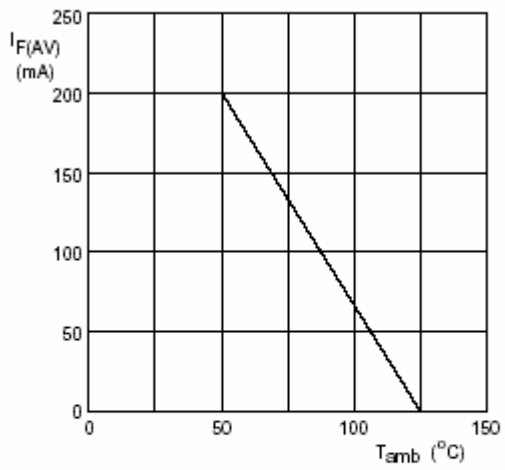
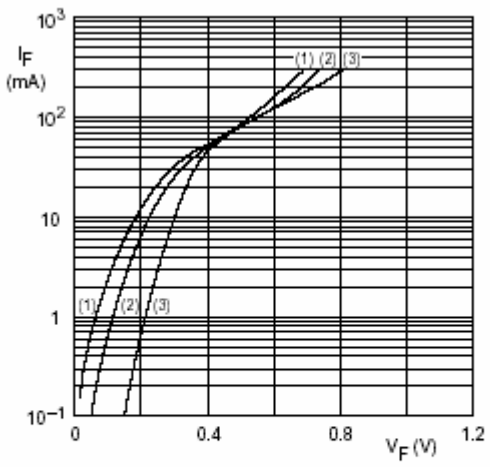
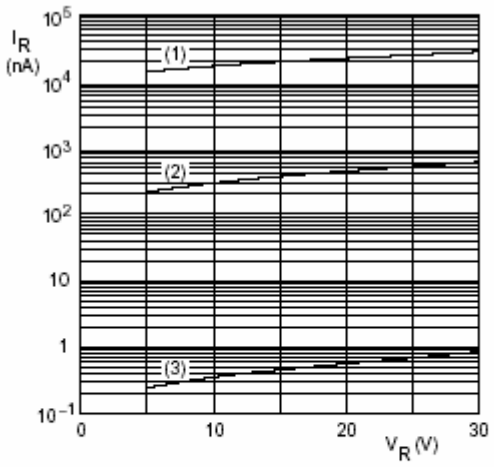


Fig. 1 Derating curve.



(1) T_{amb} = 125 °C.
(2) T_{amb} = 85 °C.
(3) T_{amb} = 25 °C.

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



(1) T_{amb} = 85 °C.
(2) T_{amb} = 25 °C.
(3) T_{amb} = −40 °C.

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