

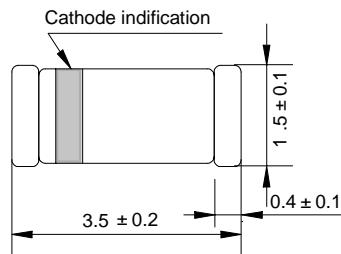
SCHOTTKY BARRIER DIODE
BAS85
FEATURES

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

MECHANICAL DATA

Polarity: Color band denotes cathode

Case: LL-34 glass case



LL-34(SOD-80) Dimensions in millimeters

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
Operating ambient temperature	T_{amb}	-65 to +125	$^\circ\text{C}$
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature range	T_s	-65 to +150	$^\circ\text{C}$
Thermal resistance from junction to ambient	R_{thja}	320	K/W

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
Forward voltage at $I_F = 0.1\text{mA}$	V_F	-	-	240	mV
at $I_F = 1\text{mA}$	V_F	-	-	320	mV
at $I_F = 10\text{mA}$	V_F	-	-	400	mV
at $I_F = 30\text{mA}$	V_F	-	-	500	mV
at $I_F = 100\text{mA}$	V_F	-	-	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

BAS85 Typical Characteristics

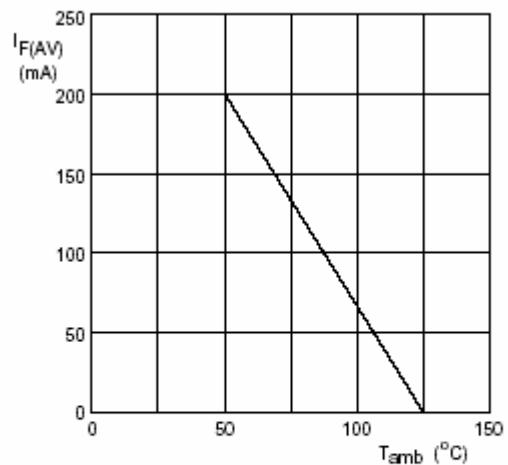
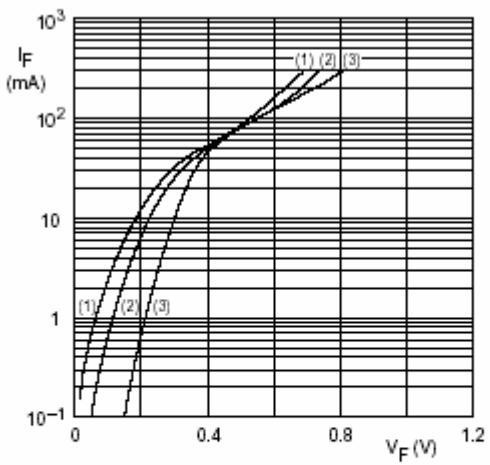
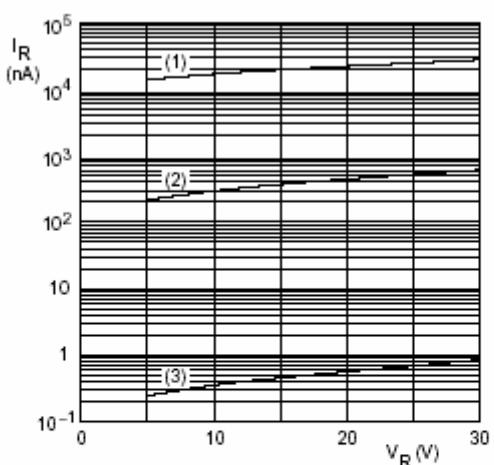


Fig. 1 Derating curve.



(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.