

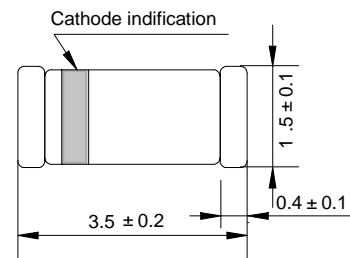
SCHOTTKY BARRIER DIODE
FEATURES

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

MECHANICAL DATA

Polarity: Color band denotes cathode

Case: LL-34 glass case

BAS86


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	50	V
Continuous forward current	I_F	200	mA
Average forward current	$I_{F(AV)}$	200	mA
Repetitive peak forward current	I_{FRM}	500	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	-	-	300	mV
at $I_F = 1\text{mA}$	V_F	-	-	380	mV
at $I_F = 10\text{mA}$	V_F	-	-	450	mV
at $I_F = 30\text{mA}$	V_F	-	-	600	mV
at $I_F = 100\text{mA}$	V_F	-	-	90	mV
Reverse current					
at $V_R = 40\text{V}$	I_R	-	-	5	μA
Reverse recovery time					
at $I_F = 10\text{mA}$, $I_R = 10\text{mA}$, $R_L = 100\Omega$	t_{rr}	-	-	4	ns

BAS86 Typical Characteristics

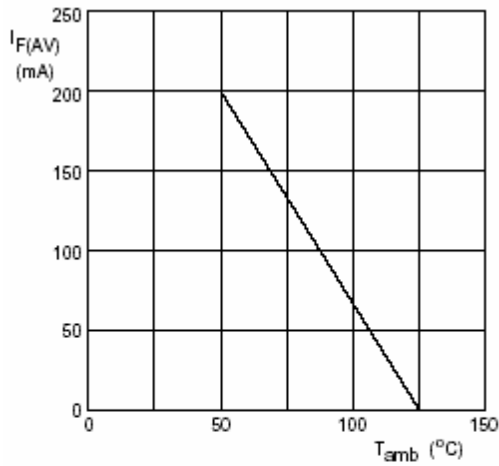
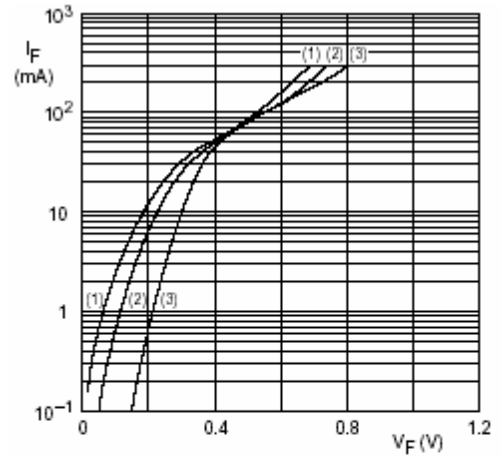
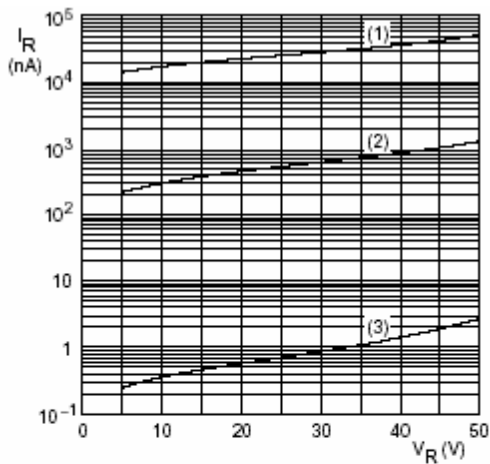


Fig.1 Derating curve.



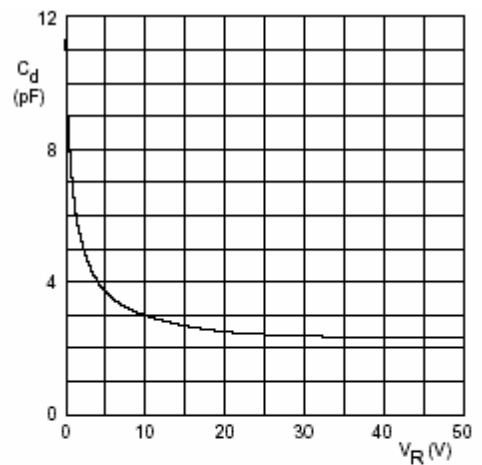
- (1) T_{amb} = 125 °C.
- (2) T_{amb} = 85 °C.
- (3) T_{amb} = 25 °C.

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.



f = 1 MHz.

Fig. 4 Diode capacitance as a function of reverse voltage; typical values.