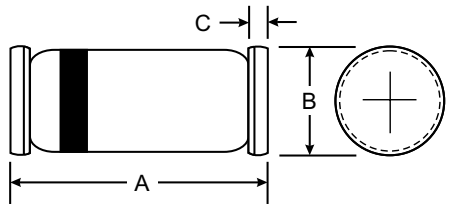
BAS85

SURFACE MOUNT SMALL SIGNAL SCHOTTKY DIODE

VOLTAGE RANGE: 50 V
CURRENT: 0.2 A

Features

- For general purpose applications
- This diode features very low turn-on voltage and fast switching. These devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges



LL34/ SOD-80		
Dim	**Min**	**Max**
A	3.30	3.70
B	1.30	1.60
C	0.28	0.50
All Dimensions in mm		

Mechanical Data

- Case: SOD-80(LL34) ,glass case
- Polarity: Color band denotes cathode end
- Weight: Approx.0.031 grams

RoHS COMPLIANT

Maximum Ratings and Electrical Characteristics

T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	Value	Unit
Continuous reverse voltage	V_R	50	V
Forward continuous current @ T_A=25℃	I_F	200 [1]	mA
Peak forward current @ T_A=25 ℃	I_{FM}	500 [1]	mA
Surge forw ard current @ t_p<1s,T_A=25 ℃	I_{FSM}	5 [1]	A
Power dissipation @ T_A=65 ℃	P_{tot}	200 [1]	mW
Junction temperature	T_J	125	℃
Ambient operating temperature range	T_A	-55 ---+ 125	℃
Storage temperature range	T_{STG}	-55 ---+ 150	℃

1) Valid provided that leads at a distance of 4mm from case are kept at ambient temperature

Characteristic	Symbol		Typ.	Max.	Unit
Reverse breakdow n voltage	V_R	50.0			V
Forw ard voltage Pulse test tp<300 μ s, δ <2% @ I_F=0.1mA @ I_F=1mA @ I_F=10mA @ I_F=30mA @ I_F=100mA	V_F			 0.30 0.38 0.45 0.60 0.90	 V V V V V
Leakage current V_R=40V	I_R			5.0	μ A
Diode capacitance at V_R=1V,f=1MHz	C_d			8	pF
Reverse recovery time @ I_F=10mA,I_R=10mA,I_R=1mA	t_{rr}			5	ns
Thermal resistance junction to ambient	$R_{\theta JA}$			430 [1]	℃/W

1) Valid provided that leads at a distance of 4mm from case are kept at ambient temperature

FIG.1-- ADMISSIBLEPOWERDISSIPATIONVS. AMBIENT TEMPERATURE

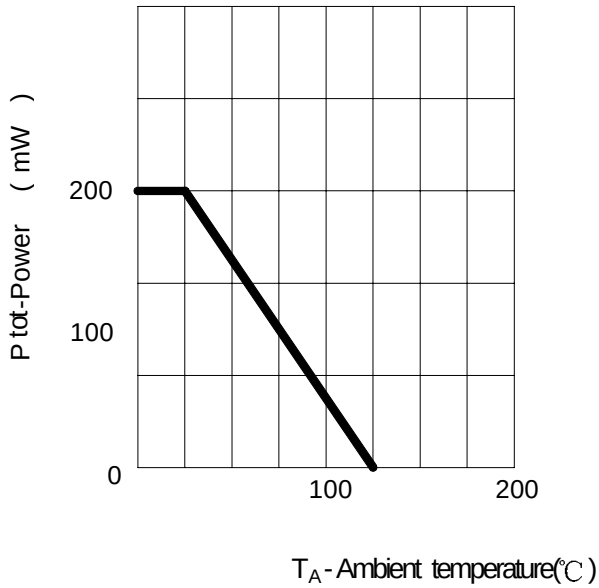


FIG. 2--TYPICAL INSTANTANEOUS FORWORD CHARACTERISTICS

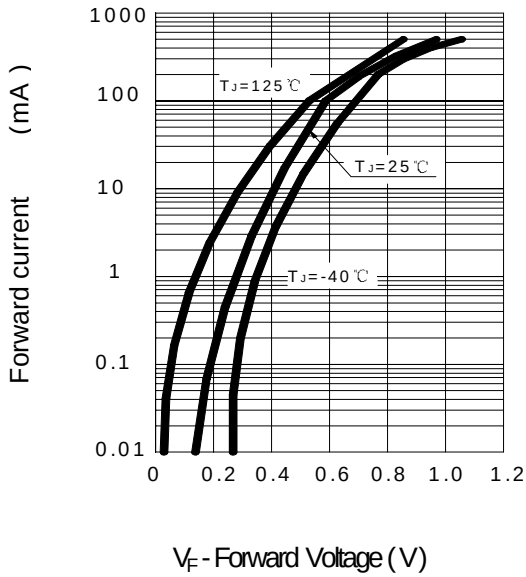


FIG. 3 – TYPICAL REVERSE CHARACTERISTICS

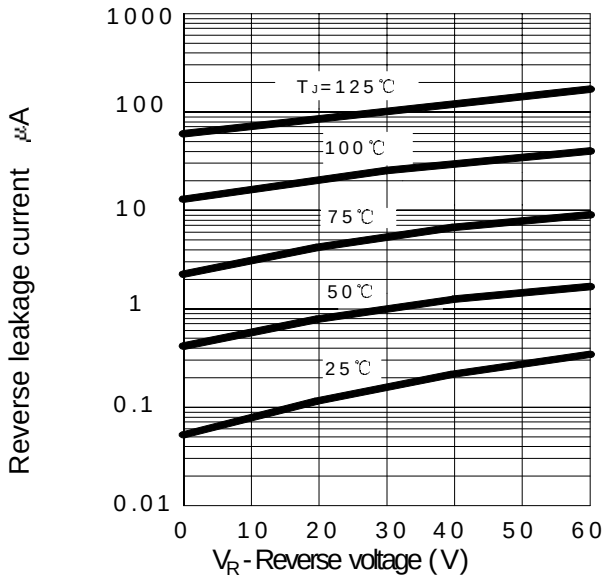


FIG.4 -- TYPICAL JUNCTION CAPACITANCE