BAQ133 - BAQ135

SMALL SIGNAL SWITCHING DIODES

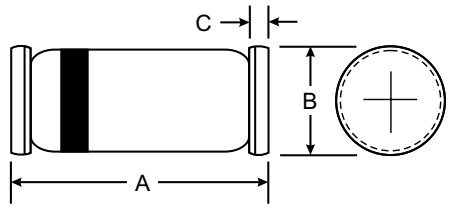
Features

- Silicon Planar Diodes
- Very low reverse current

Mechanical Data

- Case: SOD-80/LL34, Glass
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.05 grams (approx.)

RoHS COMPLIANT



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		

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%.

Parameter	Test condition	Part	Symbol	Value	Unit
Reverse voltage		BAQ133	V_R	30	V
		BAQ134	V_R	60	V
		BAQ135	V_R	125	V
Peak forward surge current	t_p = 1 µs		I_{FSM}	2	A
Forward current			I_F	200	mA

Parameter	Test condition	Symbol	Value	Unit
Thermal resistance junction to ambient air	on PC board 50 mm x 50 mm x 1.6 mm	R_{thJA}	500	K/W
Junction temperature		T_j	175	°C
Storage temperature range		T_{stg}	- 65 to + 175	°C

Electrical Characteristics T_{amb} = 25 °C, unless otherwise specified

Parameter	Test condition	Part	Symbol	Min	Typ.	Max	Unit
Forward voltage	I_F = 100 mA		V_F			1	V
Reverse current	E ≤ 300 lx, rated V_R		I_R		1	3	nA
	E ≤ 300 lx, rated V_R, T_j = 125 °C		I_R			0.5	µA
	E ≤ 300 lx, V_R = 15 V	BAQ133	I_R		0.5	1	nA
	E ≤ 300 lx, V_R = 30 V	BAQ134	I_R		0.5	1	nA
	E ≤ 300 lx, V_R = 60 V	BAQ135	I_R		0.5	1	nA
Breakdown voltage	I_R = 5 µA, t_p/T = 0.01, t_p = 0.3 ms	BAQ133	$V_{(BR)}$	40			V
		BAQ134	$V_{(BR)}$	70			V
		BAQ135	$V_{(BR)}$	140			V
Diode capacitance	V_R = 0, f = 1 MHz		C_D			3	pF

Typical Characteristics (Tamb = 25 °C unless otherwise specified)

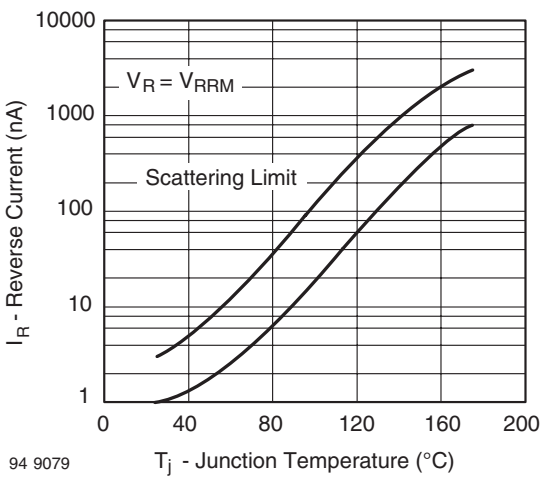


Figure 1. Reverse Current vs. Junction Temperature

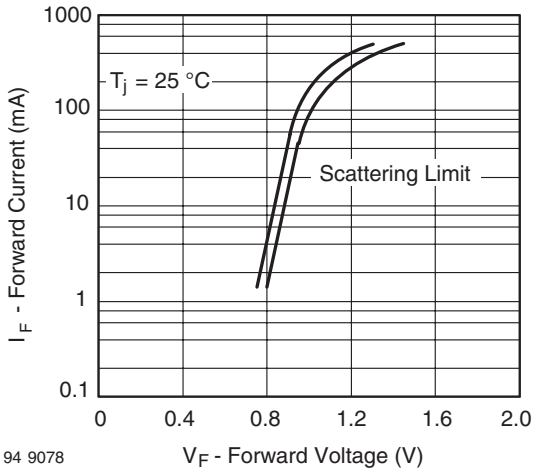


Figure 2. Forward Current vs. Forward Voltage