

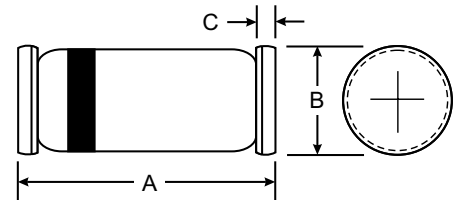


### Features

- 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.)



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 @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Test condition	Part	Symbol	Value	Unit
Reverse voltage		BAQ33	$V_R$	30	V
		BAQ34	$V_R$	60	V
		BAQ35	$V_R$	125	V
Peak forward surge current	$t_p = 1 \mu\text{s}$		$I_{FSM}$	2	A
Forward current			$I_F$	200	mA

### Thermal Characteristics $T_{amb} = 25^\circ\text{C}$ , unless otherwise specified

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	$^\circ\text{C}$
Storage temperature range		$T_{stg}$	- 65 to + 175	$^\circ\text{C}$

### Electrical Characteristics $T_{amb} = 25^\circ\text{C}$ , unless otherwise specified

Parameter	Test condition	Part	Symbol	Min	Typ.	Max	Unit
Forward voltage	$I_F = 100 \text{ mA}$		$V_F$			1	V
Reverse current	$E \leq 300 \text{ lx}$ , rated $V_R$		$I_R$		1	3	nA
	$E \leq 300 \text{ lx}$ , rated $V_R$ , $T_j = 125^\circ\text{C}$		$I_R$			0.5	$\mu\text{A}$
	$E \leq 300 \text{ lx}$ , $V_R = 15 \text{ V}$	BAQ33	$I_R$		0.5	1	nA
	$E \leq 300 \text{ lx}$ , $V_R = 30 \text{ V}$	BAQ34	$I_R$		0.5	1	nA
	$E \leq 300 \text{ lx}$ , $V_R = 60 \text{ V}$	BAQ35	$I_R$		0.5	1	nA
Breakdown voltage	$I_R = 5 \mu\text{A}$ , $t_p/T = 0.01$ , $t_p = 0.3 \text{ ms}$	BAQ33	$V_{(BR)}$	40			V
	$I_R = 5 \mu\text{A}$ , $t_p/T = 0.01$ , $t_p = 0.3 \text{ ms}$	BAQ34	$V_{(BR)}$	70			V
		BAQ35	$V_{(BR)}$	140			V
Diode capacitance	$V_R = 0$ , $f = 1 \text{ MHz}$		$C_D$			3	pF



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

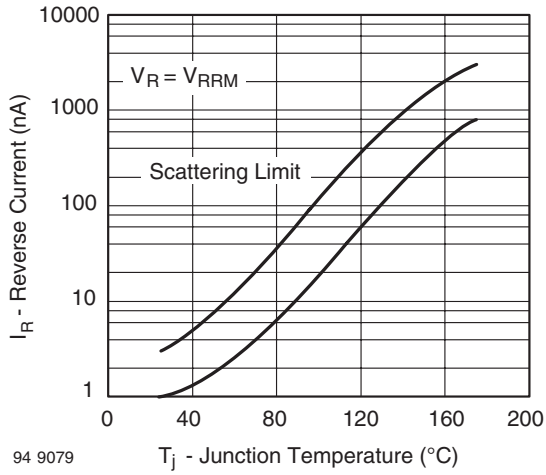


Figure 1. Reverse Current vs. Junction Temperature

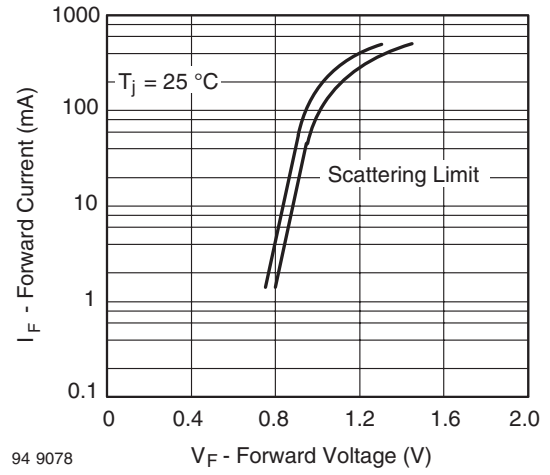


Figure 2. Forward Current vs. Forward Voltage