

Features

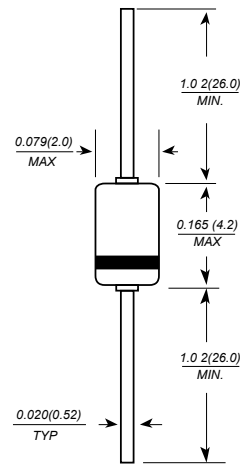
- Silicon Planar Diodes
- Very low reverse current

Mechanical Data

- Case: DO-35
- Leads: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Marking: Type Number
- Weight: 0.13 grams (approx.)



DO-35(GLASS)



Dimensions in millimeters

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

Parameter	Test condition	Part	Symbol	Value	Unit
Reverse voltage		BAS33	V_R	30	V
		BAS34	V_R	60	V
Peak forward surge current	$t_p = 1 \mu\text{s}$		I_{FSM}	2	A
Forward continuous 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	$l = 4 \text{ mm}$, $T_L = \text{constant}$	R_{thJA}	350	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			1000	mV
Reverse current	$E \leq 300 \text{ lx}$, V_R		I_R		1	3	nA
	$E \leq 300 \text{ lx}$, V_R , $T_j = 125^\circ\text{C}$		I_R			0.5	μA
	$E \leq 300 \text{ lx}$, $V_R = 15\text{V}$	BAS33	I_R		0.5	1	nA
	$E \leq 300 \text{ lx}$, $V_R = 30 \text{ V}$	BAS34	I_R		0.5	1	nA
Breakdown voltage	$I_R = 5 \mu\text{A}$, $t_p/T = 0.01$, $t_p = 0.3 \text{ ms}$	BAS33	$V_{(BR)}$	40			V
		BAS34	$V_{(BR)}$	70			V
Diode capacitance	$V_R = 0$, $f = 1 \text{ MHz}$		C_D			3	pF



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

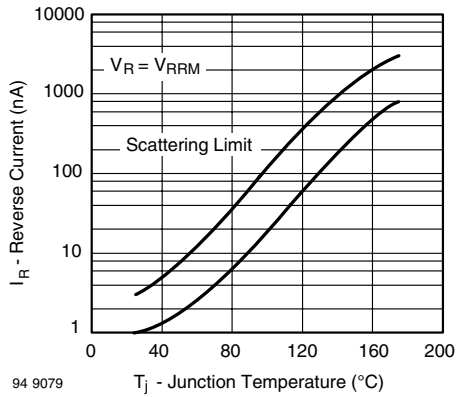


Figure 1. Reverse Current vs. Junction Temperature

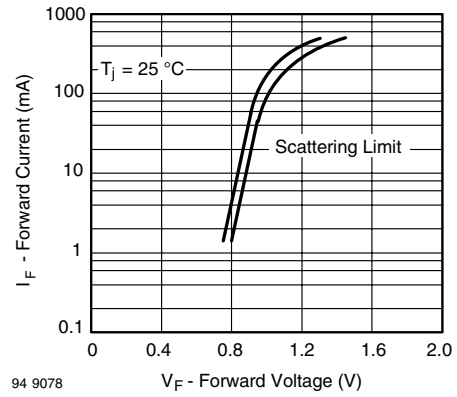


Figure 2. Forward Current vs. Forward Voltage