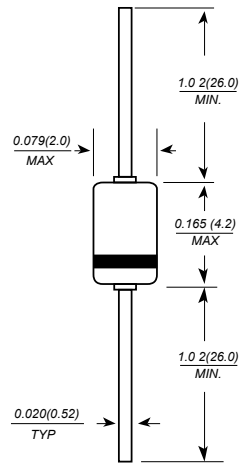
BAS33 - BAS34

SMALL SIGNAL SWITCHING DIODES

DO-35(GLASS)



Dimensions in millimeters

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.)

RoHS COMPLIANT

Maximum Ratings @ T_A = 25°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 µs		I_{FSM}	2	A
Forward continuous current			I_F	200	mA

Thermal Characteristics Tamb = 25 °C, unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Thermal resistance junction to ambient air	l = 4 mm, T_L = constant	R_{thJA}	350	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			1000	mV
Reverse current	E ≤ 300 lx, V_R		I_R		1	3	nA
	E ≤ 300 lx, V_R, T_j = 125 °C		I_R			0.5	µA
	E ≤ 300 lx, V_R = 15V	BAS33	I_R		0.5	1	nA
	E ≤ 300 lx, V_R = 30 V	BAS34	I_R		0.5	1	nA
Breakdown voltage	I_R = 5 µA, t_p/T = 0.01, t_p = 0.3 ms	BAS33	$V_{(BR)}$	40			V
		BAS34	$V_{(BR)}$	70			V
Diode capacitance	V_R = 0, f = 1 MHz		C_D			3	pF

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

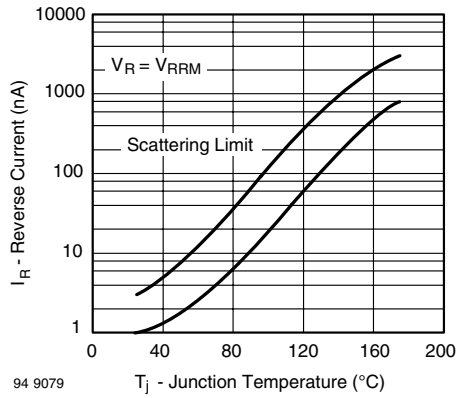


Figure 1. Reverse Current vs. Junction Temperature

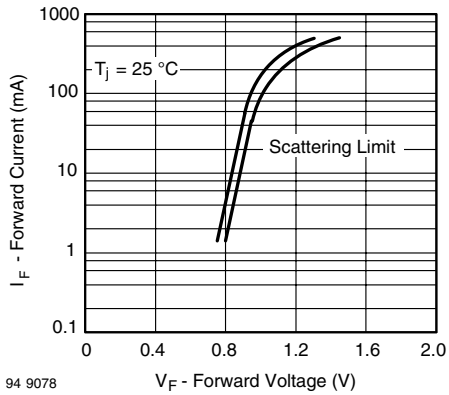


Figure 2. Forward Current vs. Forward Voltage