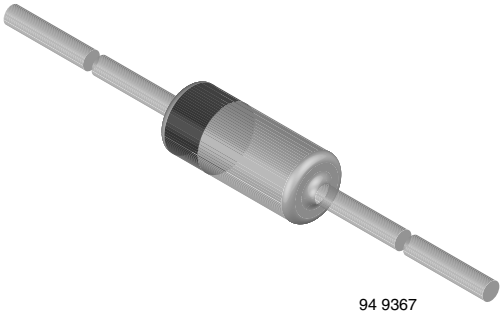
Small Signal Switching Diode, High Voltage

Features

- Silicon Planar Diode
- Very low reverse current
- Compliant to RoHS directive 2002/95/EC and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition

RoHS COMPLIANT
HALOGEN FREE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Applications

- Protection circuits, delay circuits

Mechanical Data

Case: DO-35
Weight: approx. 125 mg
Cathode Band Color: black

Packaging Codes/Options:
TR/10 k per 13" reel (52 mm tape), 50 k/box
TAP/10 k per Ammopack (52 mm tape), 50 k/box

Parts Table

Part	Ordering code	Type Marking	Remarks
BAY135	BAY135-TR or BAY135-TAP	BAY135	Tape and Reel/Ammopack

Absolute Maximum Ratings

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

Parameter	Test condition	Symbol	Value	Unit
Peak reverse voltage, non repetitive		V_{RSM}	140	V
Repetitive peak reverse voltage		V_{RRM}	140	V
Reverse voltage		V_R	125	V
Peak forward surge current	t_p = 1 µs	I_{FSM}	2	A
Average forward current	f = 50 Hz	I_{FAV}	200	mA

Thermal Characteristics

T_{amb} = 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

For technical questions within your region, please contact one of the following:
DiodesAmericas@vishay.com, DiodesAsia@vishay.com, DiodesEurope@vishay.com

Electrical Characteristics

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

Parameter	Test condition	Symbol	Min.	Typ.	Max.	Unit
Forward voltage	I_F = 100 mA	V_F			1000	mV
Reverse current	E ≤ 300 lx, V_R	I_R			3	nA
	E ≤ 300 lx, V_R, T_j = 125 °C	I_R			0.5	µA
	E ≤ 300 lx, V_R = 60 V	I_R			1	nA
Breakdown voltage	I_R = 5 µA, t_p/T = 0.01, t_p = 0.3 ms	$V_{(BR)}$	140			V
Diode capacitance	V_R = 0, f = 1 MHz	C_D			5	pF

Typical Characteristics

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

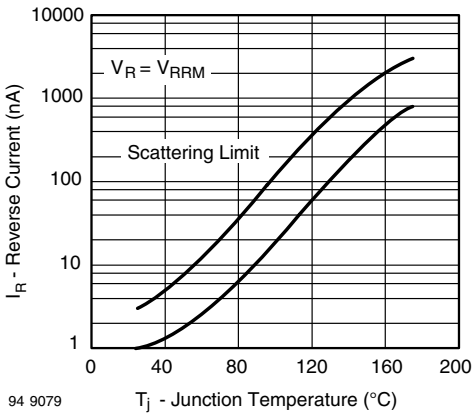


Figure 1. Reverse Current vs. Junction Temperature

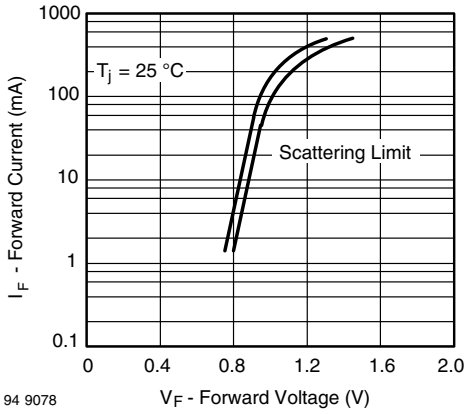
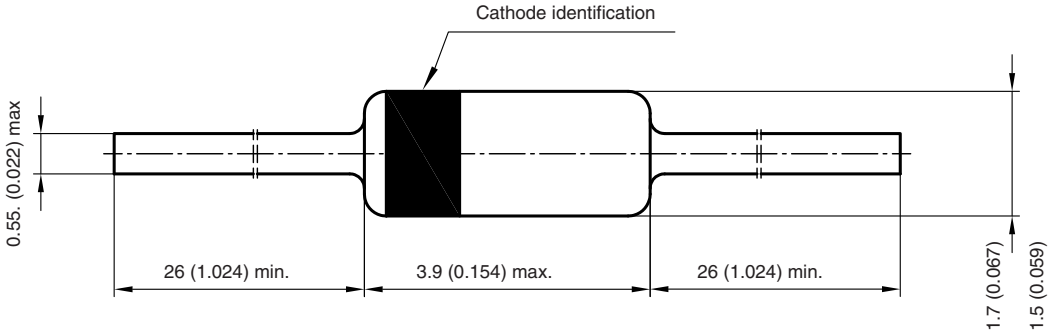


Figure 2. Forward Current vs. Forward Voltage

Package Dimensions in millimeters (inches): DO-35



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