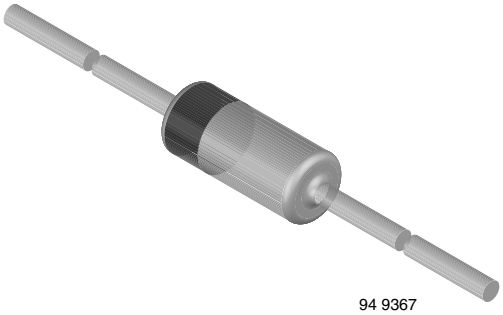
Small Signal Switching Diode

Features

- Silicon Epitaxial Planar Diode
- AEC-Q101 qualified
- 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

- Extreme fast switches

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
BAW75	BAW75-TR or BAW75-TAP	BAW75	Tape and Reel/Ammopack

Absolute Maximum Ratings

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

Parameter	Test condition	Symbol	Value	Unit
Repetitive peak reverse voltage		V_{RRM}	35	V
Reverse voltage		V_R	25	V
Peak forward surge current	t_p = 1 µs	I_{FSM}	2000	mA
Repetitive peak forward current		I_{FRM}	450	mA
Forward continuous current		I_F	300	mA
Average forward current	V_R = 0	I_{FAV}	150	mA
Power dissipation	l = 4 mm, T_L = 45 °C	P_{tot}	440	mW
	l = 4 mm, $T_L \leq$ 25 °C	P_{tot}	500	mW

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

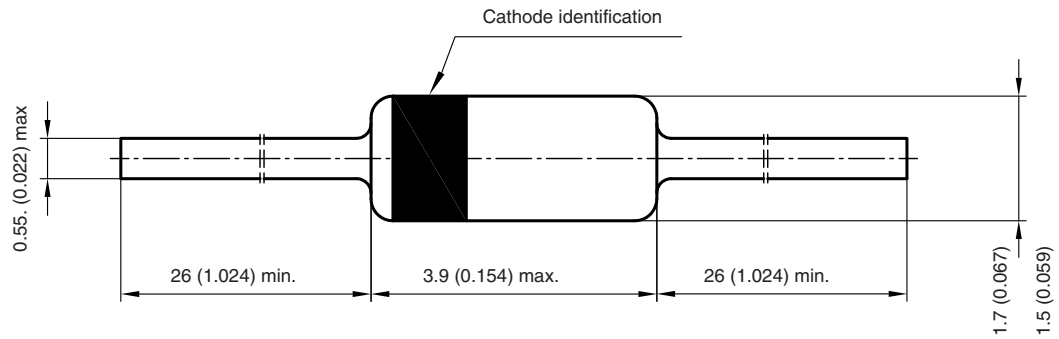
For technical questions within your region, please contact one of the following:
DiodesAmericas@vishay.com, DiodesAsia@vishay.com, DiodesEurope@vishay.com

Electrical Characteristics

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

Parameter	Test condition	Symbol	Min.	Typ.	Max.	Unit
Forward voltage	I_F = 30 mA	V_F			1000	mV
Reverse current	V_R = 25 V	I_R			100	nA
	V_R = 25 V, T_j = 150 °C	I_R			100	µA
Breakdown voltage	I_R = 5 µA, t_p/T = 0.01, t_p = 0.3 ms	$V_{(BR)}$	35			V
Diode capacitance	V_R = 0, f = 1 MHz, V_{HF} = 50 mV	C_D			4	pF
Reverse recovery time	I_F = I_R = 10 mA, I_R = 1 mA	t_{rr}			4	ns
	I_F = 10 mA, V_R = 6 V, I_R = 1 mA, R_L = 100 Ω	t_{rr}			2	ns

Package Dimensions in millimeters (inches): DO-35



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