

Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Vishay Semiconductor/Diodes Division](#)
[BAW27-TAP](#)

For any questions, you can email us directly:

sales@integrated-circuit.com



www.vishay.com

BAW27

Vishay Semiconductors

Small Signal Switching Diode



FEATURES

- Silicon epitaxial planar diode
- Low forward voltage drop
- High forward current capability
- AEC-Q101 qualified
- Material categorization:
For definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE

APPLICATIONS

- High speed switch and general purpose use in computer and industrial applications

MECHANICAL DATA

Case: DO-35

Weight: approx. 125 mg

Cathode band color: black

Packaging codes/options:

TR/10K per 13" reel (52 mm tape), 50K/box

TAP/10K per ammpack (52 mm tape), 50K/box

PARTS TABLE				
PART	ORDERING CODE	TYPE MARKING	INTERNAL CONSTRUCTION	REMARKS
BAW27	BAW27-TR or BAW27-TAP	BAW27	Single diode	Tape and reel/ammpack

ABSOLUTE MAXIMUM RATINGS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Repetitive peak reverse voltage		V_{RRM}	75	V
Reverse voltage		V_R	60	V
Peak forward surge current	$t_p = 1\text{ }\mu\text{s}$	I_{FSM}	4	A
Forward continuous current		I_F	600	mA
Average forward current	$V_R = 0$	$I_{F(AV)}$	300	mA
Power dissipation	$l = 4\text{ mm}, T_L = 45\text{ }^{\circ}\text{C}$	P_{tot}	440	mW
	$l = 4\text{ mm}, T_L \leq 25\text{ }^{\circ}\text{C}$	P_{tot}	500	mW

THERMAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, 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	$^{\circ}\text{C}$



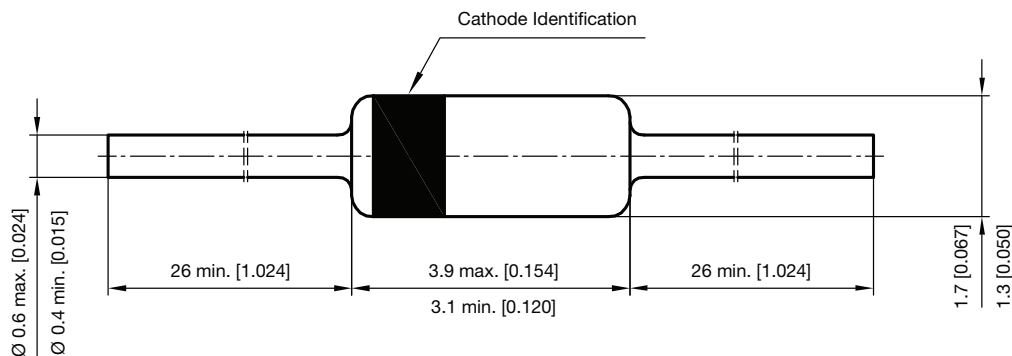
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ELECTRICAL CHARACTERISTICS (T _{amb} = 25 °C, unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
Forward voltage	I _F = 10 mA	V _F		0.670	0.750	V
	I _F = 50 mA	V _F		800	850	mV
	I _F = 200 mA	V _F		950	1000	mV
	I _F = 400 mA	V _F		1120	1250	mV
Reverse current	V _R = 60 V	I _R			100	nA
	V _R = 60 V, T _j = 100 °C	I _R			50	µA
Breakdown voltage	I _R = 5 µA, t _p /T = 0.01, t _p = 0.3 ms	V _(BR)	75			V
Diode capacitance	V _R = 0 V, f = 1 MHz, V _{HF} = 50 mV	C _D			4	pF
Reverse recovery time	I _F = I _R = 10 mA, i _R = 0.1 x I _R	t _{rr}			6	ns

PACKAGE DIMENSIONS in millimeters (inches): **DO-35**



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