

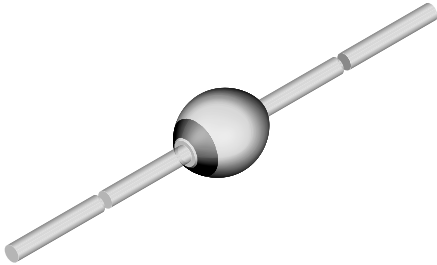


# THE DATASHEET OF BYW32-TAP





Fast Avalanche Sinterglass Diode



949539

FEATURES

- Glass passivated junction
• Hermetically sealed package
• Low reverse current
• Soft recovery characteristics
• Material categorization:
For definitions of compliance please see
www.vishay.com/doc?99912



RoHS COMPLIANT HALOGEN FREE

APPLICATIONS

- Fast rectification an switching diode for example for TV-line output circuits and switch mode power supply

MECHANICAL DATA

Case: SOD-57

Terminals: plated axial leads, solderable per MIL-STD-750, method 2026

Polarity: color band denotes cathode end

Mounting position: any

Weight: approx. 369 mg

Table with 4 columns: DEVICE NAME, ORDERING CODE, TAPED UNITS, MINIMUM ORDER QUANTITY. Rows for BYW36 (TR and TAP).

Table with 3 columns: PART, TYPE DIFFERENTIATION, PACKAGE. Rows for BYW32 through BYW36.

Table with 6 columns: PARAMETER, TEST CONDITION, PART, SYMBOL, VALUE, UNIT. Rows for Reverse voltage, Peak forward surge current, Repetitive peak forward current, Average forward current, Non repetitive reverse avalanche energy, Junction and storage temperature range.

MAXIMUM THERMAL RESISTANCE ( $T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Junction ambient	Lead length $l = 10\text{ mm}$ , $T_L = \text{constant}$	$R_{thJA}$	45	K/W
	On PC board with spacing 25 mm	$R_{thJA}$	100	K/W

ELECTRICAL CHARACTERISTICS ( $T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified)							
PARAMETER	TEST CONDITION	PART	SYMBOL	MIN.	TYP.	MAX.	UNIT
Forward voltage	$I_F = 1\text{ A}$		$V_F$	-	0.95	1.1	V
Reverse current	$V_R = V_{RRM}$		$I_R$	-	1	5	$\mu\text{A}$
	$V_R = V_{RRM}$ , $T_j = 150\text{ }^{\circ}\text{C}$		$I_R$	-	60	150	$\mu\text{A}$
Reverse recovery time	$I_F = 0.5\text{ A}$ , $I_R = 1\text{ A}$ , $i_R = 0.25\text{ A}$		$t_{rr}$	-	-	200	ns

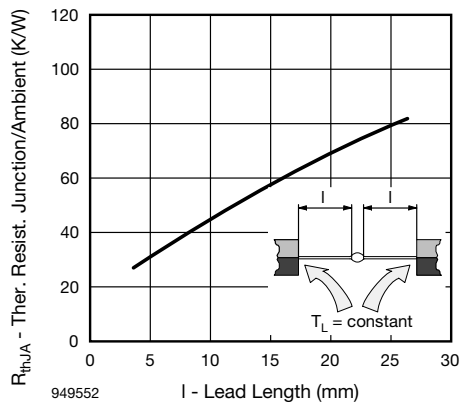
**TYPICAL CHARACTERISTICS** ( $T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified)


Fig. 1 - Max. Thermal Resistance vs. Lead Length

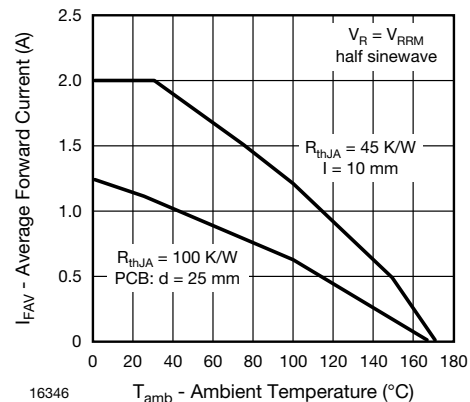


Fig. 3 - Max. Average Forward Current vs. Ambient Temperature

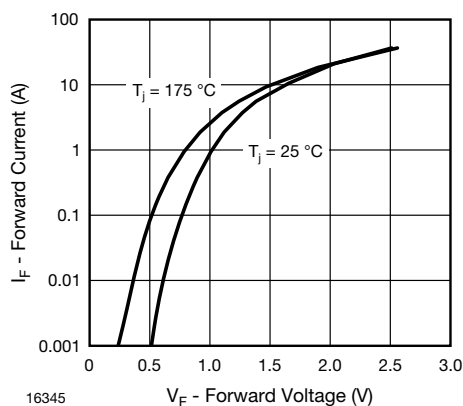
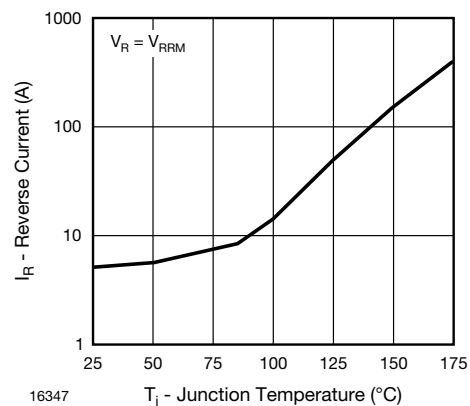


Fig. 2 - Forward Current vs. Forward Voltage


 Fig. 4 - Reverse Current vs. Junction Temperature ( $^{\circ}\text{C}$ )

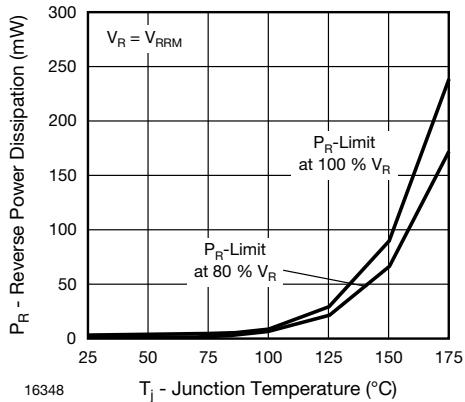


Fig. 5 - Max. Reverse Power Dissipation vs. Junction Temperature

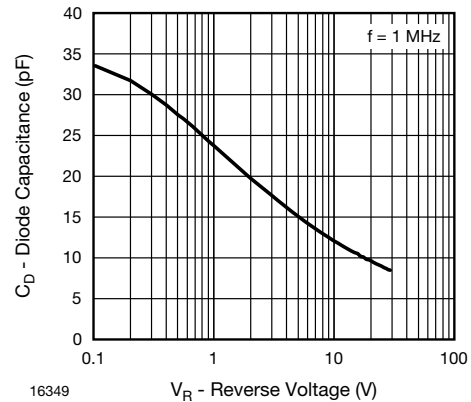


Fig. 6 - Diode Capacitance vs. Reverse Voltage

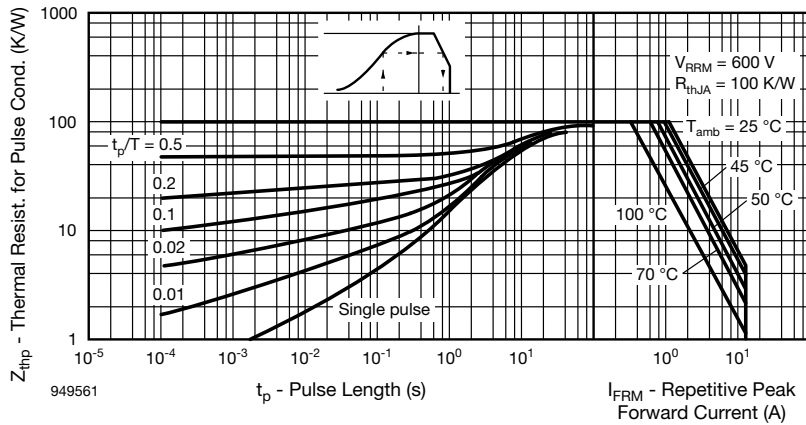
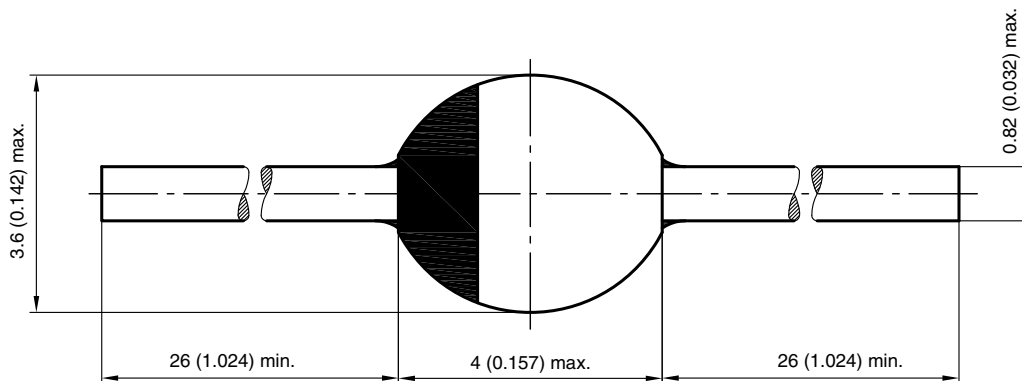


Fig. 7 - Thermal Response

## PACKAGE DIMENSIONS in millimeters (inches): SOD-57



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