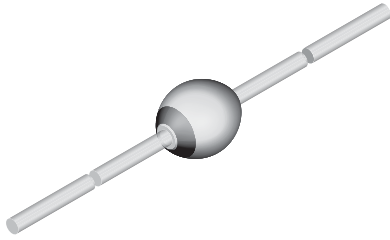




Ultra-Fast Avalanche Sinterglass Diode



949539

FEATURES

- Controlled avalanche characteristic
Low forward voltage
Ultra fast recovery time
Glass passivated junction
Hermetically sealed package
Material categorization: For definitions of compliance please see www.vishay.com/doc?99912



RoHS COMPLIANT HALOGEN FREE

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

APPLICATIONS

- Very fast rectification diode e.g. for switch mode power supply

Table with 4 columns: DEVICE NAME, ORDERING CODE, TAPED UNITS, MINIMUM ORDER QUANTITY. Includes rows for BYV27-200 in TR and TAP configurations.

Table with 3 columns: PART, TYPE DIFFERENTIATION, PACKAGE. Lists diode models and their respective reverse voltages and forward currents.

Table with 6 columns: PARAMETER, TEST CONDITION, PART, SYMBOL, VALUE, UNIT. Lists absolute maximum ratings for various parameters like peak reverse voltage, reverse voltage, and surge current.

Table with 5 columns: PARAMETER, TEST CONDITION, SYMBOL, VALUE, UNIT. Lists maximum thermal resistance for junction ambient under different conditions.

ELECTRICAL CHARACTERISTICS (T <sub>amb</sub> = 25 °C, unless otherwise specified)							
PARAMETER	TEST CONDITION	PART	SYMBOL	MIN.	TYP.	MAX.	UNIT
Forward voltage	I <sub>F</sub> = 3 A		V <sub>F</sub>	-	-	1.07	V
	I <sub>F</sub> = 3 A, T <sub>j</sub> = 175 °C		V <sub>F</sub>	-	-	0.88	V
Reverse current	V <sub>R</sub> = V <sub>RRM</sub>		I <sub>R</sub>	-	-	1	μA
	V <sub>RSM</sub>		I <sub>R</sub>	-	-	100	μA
	V <sub>R</sub> = V <sub>RRM</sub> , T <sub>j</sub> = 165 °C		I <sub>R</sub>	-	-	150	μA
Reverse recovery time	I <sub>F</sub> = 0.5 A, I <sub>R</sub> = 1 A, I <sub>R</sub> = 0.25 A		t <sub>rr</sub>	-	-	25	ns

**TYPICAL CHARACTERISTICS** (T<sub>amb</sub> = 25 °C, unless otherwise specified)

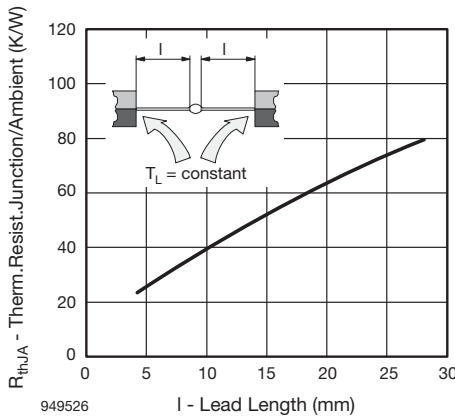


Fig. 1 - Typ. Thermal Resistance vs. Lead Length

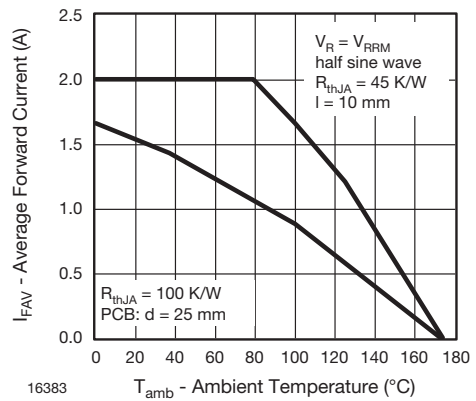


Fig. 3 - Max. Average Forward Current vs. Ambient Temperature

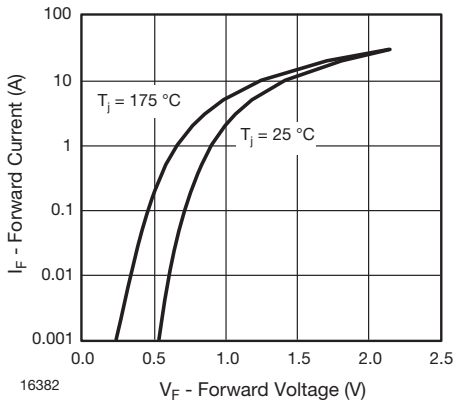


Fig. 2 - Forward Current vs. Forward Voltage

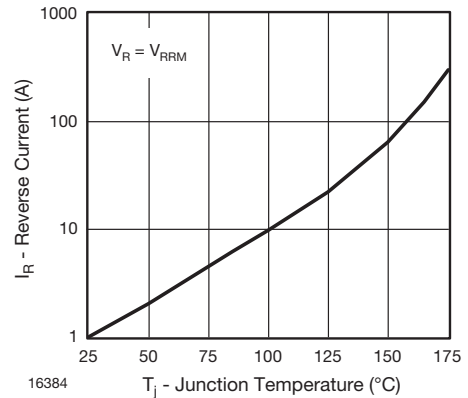


Fig. 4 - Reverse Current vs. Junction Temperature



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



Fig. 6 - Diode Capacitance vs. Reverse Voltage

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



20543  
 Rev. 3 - Date: 09.February 2005  
 Document no.:6.563-5006.3-4



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