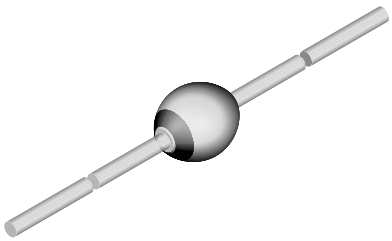
Standard Avalanche Sinterglass Diode



949539

FEATURES

- Glass passivated junction
- Hermetically sealed package
- Controlled avalanche characteristics
- 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

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

- High voltage rectification diode

PARTS TABLE		
PART	**TYPE DIFFERENTIATION**	**PACKAGE**
BYT62	V_R = 2400 V; I_{FAV} = 350 mA	SOD-57

ABSOLUTE MAXIMUM RATINGS (T_{amb} = 25 °C, unless otherwise specified)				
PARAMETER	**TEST CONDITION**	**SYMBOL**	**VALUE**	**UNIT**
Reverse voltage = repetitive peak reverse voltage	See electrical characteristics	$V_R = V_{RRM}$	2400	V
Peak forward surge current	t_p = 10 ms, half sine wave	I_{FSM}	10	A
Average forward current	$R_{thJA} \leq$ 60 K/W	I_{FAV}	350	mA
Non repetitive reverse avalanche energy	$I_{(BR)R}$ = 1 A, inductive load	E_R	60	mJ
Junction temperature		T_j	175	°C
Storage temperature range		T_{stg}	- 55 to + 190	°C

MAXIMUM THERMAL RESISTANCE (T_{amb} = 25 °C, unless otherwise specified)				
PARAMETER	**TEST CONDITION**	**SYMBOL**	**VALUE**	**UNIT**
Junction ambient	Lead length l = 10 mm, T_L = constant	R_{thJA}	60	K/W

ELECTRICAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)						
PARAMETER	**TEST CONDITION**	**SYMBOL**	**MIN.**	**TYP.**	**MAX**	**UNIT**
Forward voltage	I_F = 200 mA	V_F	-	-	3	V
	I_F = 1 A	V_F	-	-	3.6	V
	I_F = 1 A, T_j = 175 °C	V_F	-	-	2.9	V
	I_F = 1 A, T_j = - 40 °C	V_F	-	-	4	V
Reverse current	$V_R = V_{RRM}$	I_R	-	-	5	µA
	$V_R = V_{RRM}$, T_j = 175 °C	I_R	-	-	250	µA
	$V_R = V_{RRM}$, T_j = - 40 °C	I_R	-	-	400	nA
Reverse breakdown voltage	I_R = 100 µA	$V_{(BR)R}$	2500	-	-	V
Reverse recovery time	I_F = 0.5 A, I_R = 1 A, i_R = 0.25 A	t_{rr}	-	-	5	µs

For technical questions within your region, please contact one of the following:
DiodesAmericas@vishay.com, DiodesAsia@vishay.com, DiodesEurope@vishay.com
Document Number: 86033
Rev. 1.7, 25-Aug-10

TYPICAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)

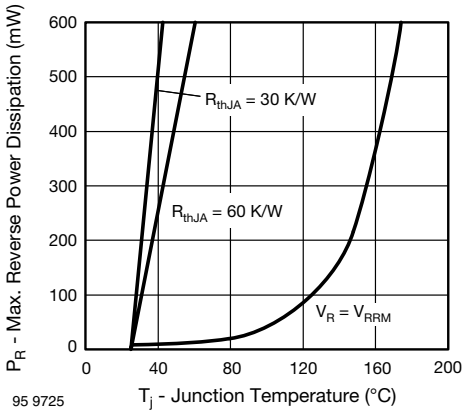


Fig. 1 - Max. Reverse Power Dissipation vs. Junction Temperature

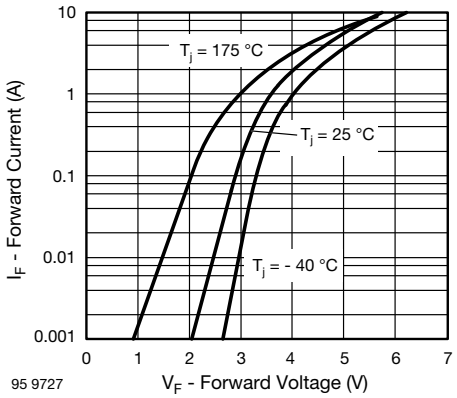


Fig. 3 - Max. Forward Current vs. Forward Voltage

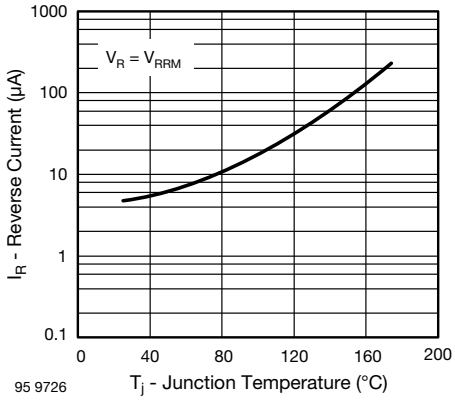
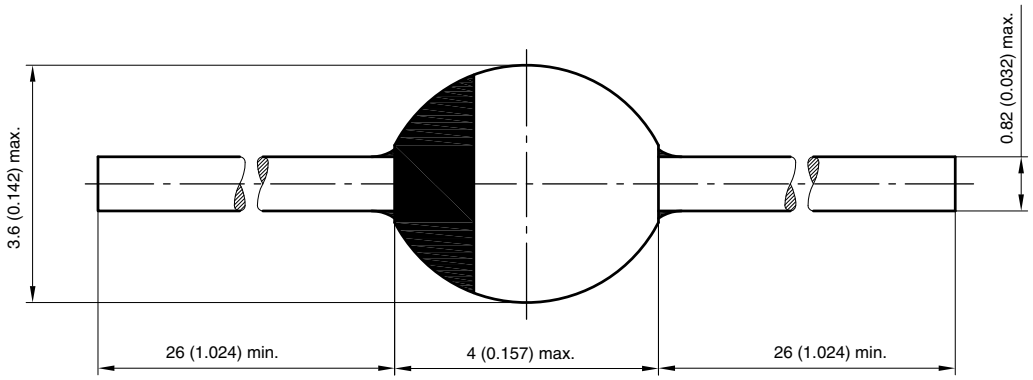


Fig. 2 - Max. Reverse Current vs. Junction Temperature

PACKAGE DIMENSIONS in millimeters (inches): SOD-57



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

Disclaimer

All product specifications and data are subject to change without notice.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, “Vishay”), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay’s terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.