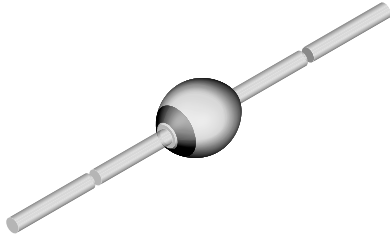


## Standard Avalanche Sinterglass Diode



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	$V_R = 2400\text{ V}$ ; $I_{FAV} = 350\text{ mA}$	SOD-57

### ABSOLUTE MAXIMUM RATINGS ( $T_{amb} = 25\text{ }^\circ\text{C}$ , 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	$t_p = 10\text{ ms}$ , half sine wave	$I_{FSM}$	10	A
Average forward current	$R_{thJA} \leq 60\text{ K/W}$	$I_{FAV}$	350	mA
Non repetitive reverse avalanche energy	$I_{(BR)R} = 1\text{ A}$ , inductive load	$E_R$	60	mJ
Junction temperature		$T_j$	175	$^\circ\text{C}$
Storage temperature range		$T_{stg}$	- 55 to + 190	$^\circ\text{C}$

### MAXIMUM THERMAL RESISTANCE ( $T_{amb} = 25\text{ }^\circ\text{C}$ , unless otherwise specified)

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Junction ambient	Lead length $l = 10\text{ mm}$ , $T_L = \text{constant}$	$R_{thJA}$	60	K/W

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

PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX	UNIT
Forward voltage	$I_F = 200\text{ mA}$	$V_F$	-	-	3	V
	$I_F = 1\text{ A}$	$V_F$	-	-	3.6	V
	$I_F = 1\text{ A}$ , $T_j = 175\text{ }^\circ\text{C}$	$V_F$	-	-	2.9	V
	$I_F = 1\text{ A}$ , $T_j = -40\text{ }^\circ\text{C}$	$V_F$	-	-	4	V
Reverse current	$V_R = V_{RRM}$	$I_R$	-	-	5	$\mu\text{A}$
	$V_R = V_{RRM}$ , $T_j = 175\text{ }^\circ\text{C}$	$I_R$	-	-	250	$\mu\text{A}$
	$V_R = V_{RRM}$ , $T_j = -40\text{ }^\circ\text{C}$	$I_R$	-	-	400	nA
Reverse breakdown voltage	$I_R = 100\text{ }\mu\text{A}$	$V_{(BR)R}$	2500	-	-	V
Reverse recovery time	$I_F = 0.5\text{ A}$ , $I_R = 1\text{ A}$ , $i_R = 0.25\text{ A}$	$t_{rr}$	-	-	5	$\mu\text{s}$

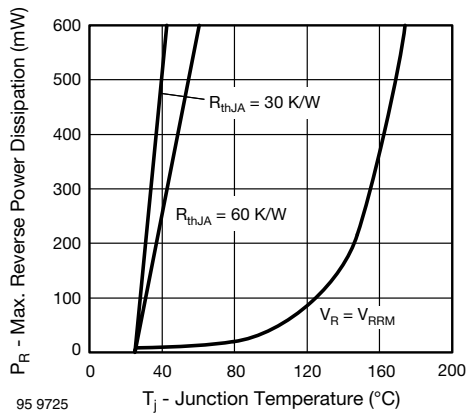
**TYPICAL CHARACTERISTICS** ( $T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified)


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

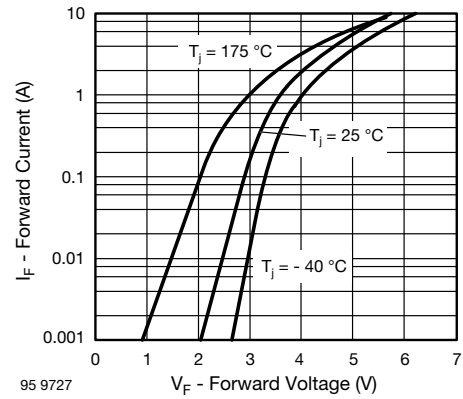


Fig. 3 - Max. Forward Current vs. Forward Voltage

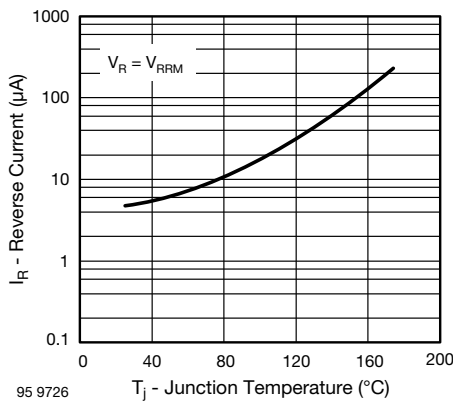
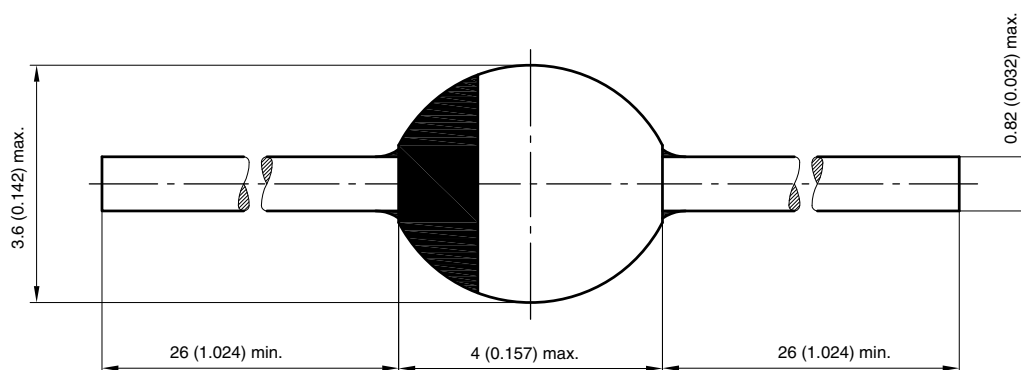


Fig. 2 - Max. Reverse Current vs. Junction Temperature

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


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