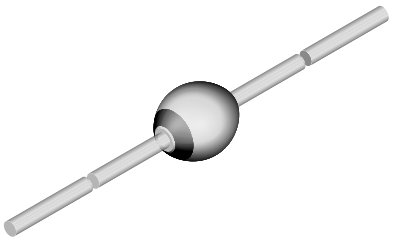
Standard Avalanche Sinterglass Diode



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FEATURES

- Glass passivated junction
- Hermetically sealed package
- Controlled avalanche characteristics
- Low reverse current
- 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

- High voltage rectification diode

ORDERING INFORMATION (Example)			
DEVICE NAME	**ORDERING CODE**	**TAPED UNITS**	**MINIMUM ORDER QUANTITY**
BYT62	BYT62-TR	5000 per 10" tape and reel	25 000
BYT62	BYT62-TAP	5000 per ammopack	25 000

PARTS TABLE		
PART	**TYPE DIFFERENTIATION**	**PACKAGE**
BYT62	V_R = 2400 V; $I_{F(AV)}$ = 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	$I_{F(AV)}$	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

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

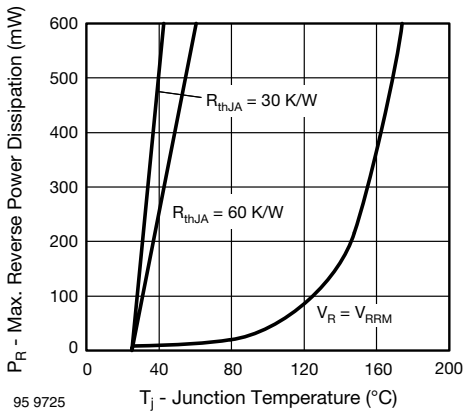


Fig. 1 - Max. Reverse Power Dissipation vs. Junction Temperature

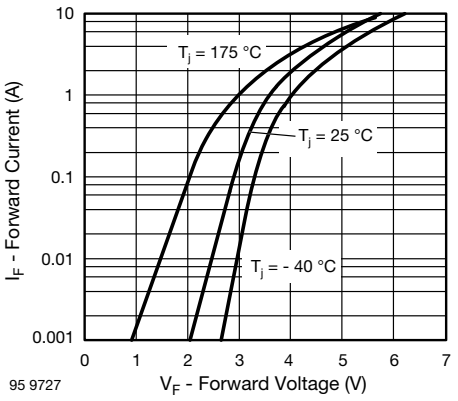


Fig. 3 - Max. Forward Current vs. Forward Voltage

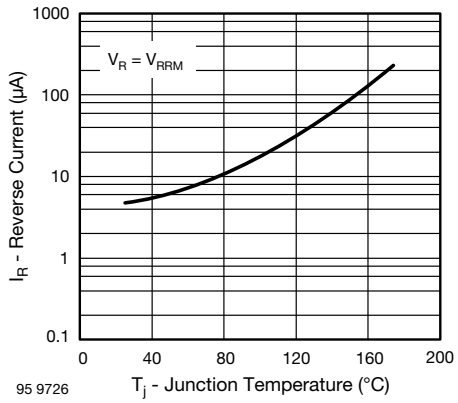
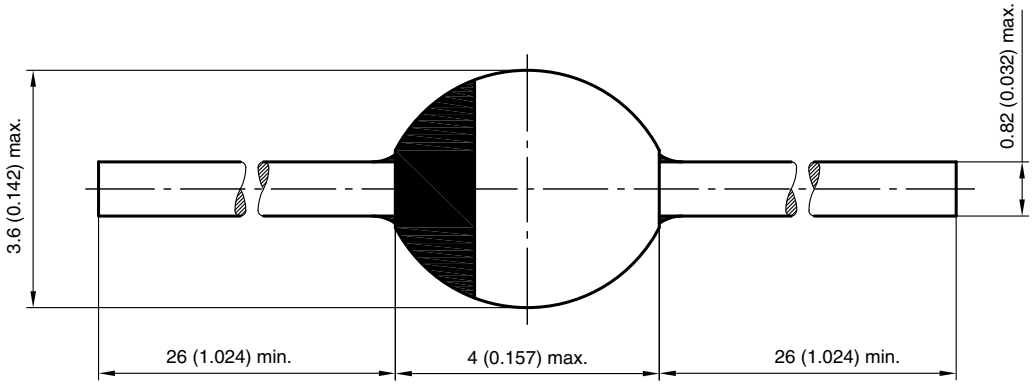


Fig. 2 - Max. Reverse Current vs. Junction Temperature

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



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

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