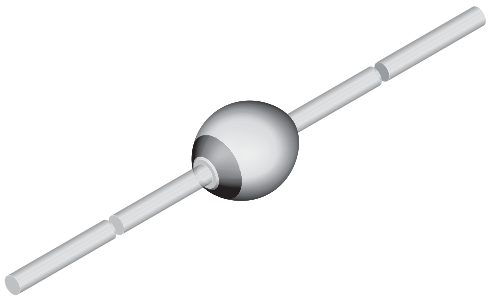
Standard Avalanche Sinterglass Diode



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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

APPLICATIONS

- High voltage rectification diode

DESIGN SUPPORT TOOLS

click logo to get started

3D Models Available

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

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	PART	SYMBOL	VALUE	UNIT
Reverse voltage = repetitive peak reverse voltage	See electrical characteristics	BYT62	$V_R = V_{RRM}$	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		$I_{F(AV)}$	0.350	A
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 = 0.2 A	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}	-	-	5000	ns

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

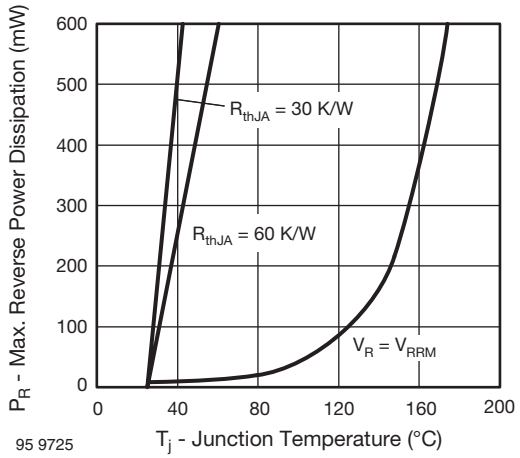


Fig. 1 - Max. Reverse Power Dissipation vs. Junction Temperature

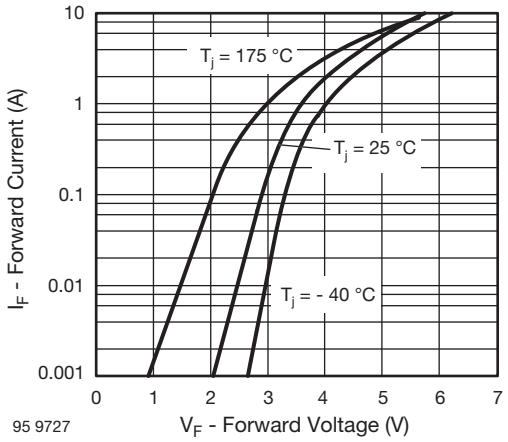


Fig. 3 - Max. Forward Current vs. Forward Voltage

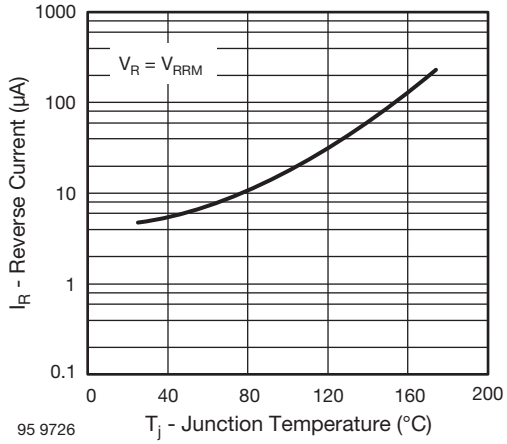
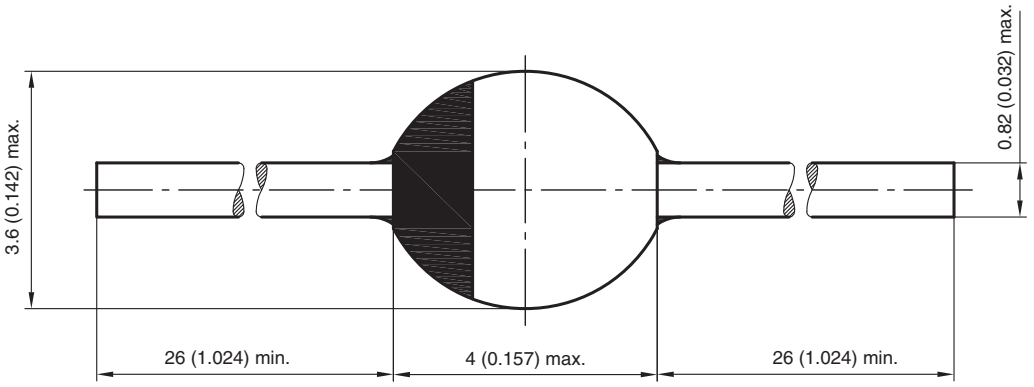


Fig. 2 - Max. Reverse Current vs. Junction Temperature

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



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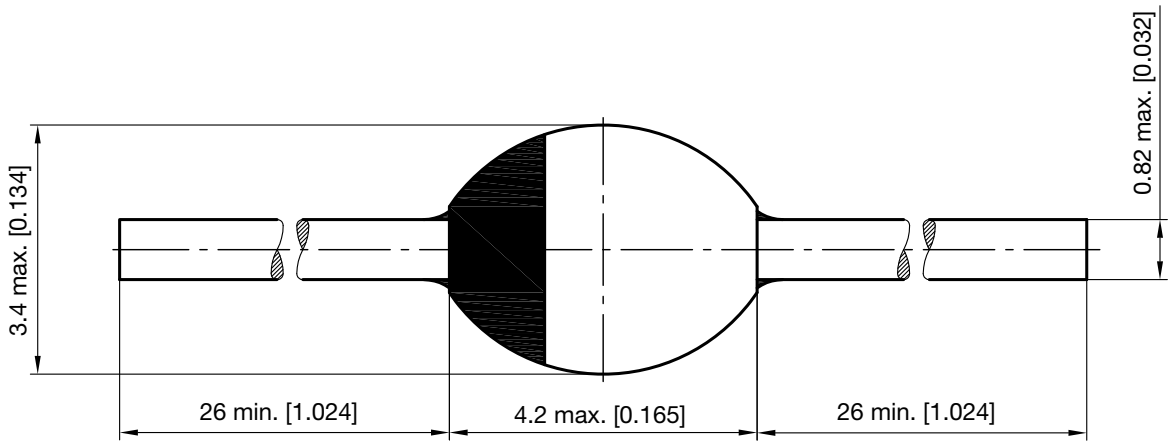
SOD-57
BYT62-BY203

PACKAGE DIMENSIONS in millimeters (inches)



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