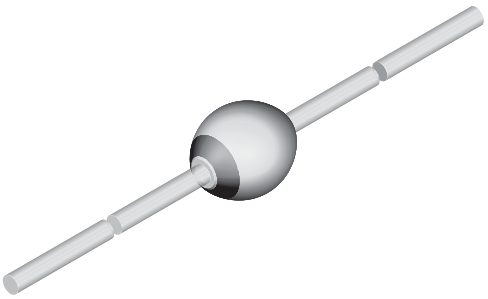
Fast Avalanche Sinterglass Diode



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FEATURES

- Glass passivated junction
- Hermetically sealed package
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb e2 RoHS COMPLIANT HALOGEN FREE

APPLICATIONS

- High voltage fast 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**
BY269	BY269TR	5000 per 10" tape and reel	25 000
BY269	BY269TAP	5000 per ammopack	25 000

PARTS TABLE		
PART	**TYPE DIFFERENTIATION**	**PACKAGE**
BY268	V_R = 1400 V; $I_{F(AV)}$ = 0.8 A	SOD-57
BY269	V_R = 1600 V; $I_{F(AV)}$ = 0.8 A	SOD-57

ABSOLUTE MAXIMUM RATINGS (T_{amb} = 25 °C, unless otherwise specified)					
PARAMETER	**TEST CONDITION**	**PART**	**SYMBOL**	**VALUE**	**UNIT**
Reverse voltage	See electrical characteristics	BY268	V_R	1400	V
		BY269	V_R	1600	V
Peak reverse voltage, non repetitive		BY268	V_{RSM}	1600	V
		BY269	V_{RSM}	1800	V
Peak forward surge current	t_p = 10 ms, half sine wave		I_{FSM}	20	A
Average forward current			$I_{F(AV)}$	0.8	A
Non repetitive reverse avalanche energy	$I_{(BR)R}$ = 0.4 A		E_R	10	mJ
Junction and storage temperature range			$T_j = T_{stg}$	-55 to +175	°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}	45	K/W
	On PC board with spacing 25 mm	R_{thJA}	100	K/W

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ELECTRICAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)							
PARAMETER	TEST CONDITION	PART	SYMBOL	MIN.	TYP.	MAX.	UNIT
Forward voltage	I_F = 0.4 A		V_F	-	-	1.25	V
Reverse current	V_R = 1400 V	BY268	I_R	-	1	2	µA
	V_R = 1600 V	BY269	I_R	-	1	2	µA
	V_R= 1400 V, T_j = 100 °C	BY268	I_R	-	-	15	µA
	V_R= 1600 V, T_j = 100 °C	BY269	I_R	-	-	15	µA
Reverse recovery time	I_F = 0.5 A, I_R = 1 A, i_R = 0.25 A		t_{rr}	-	-	400	ns

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

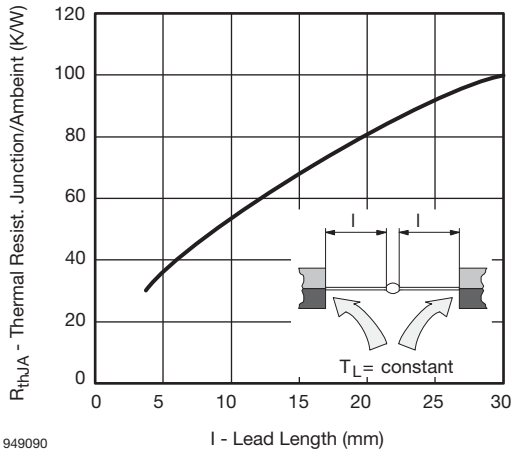

Fig. 1 - Max. Thermal Resistance vs. Lead Length

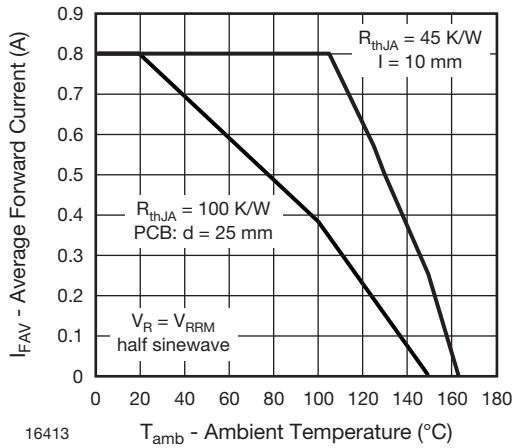

Fig. 3 - Max. Average Forward Current vs. Ambient Temperature

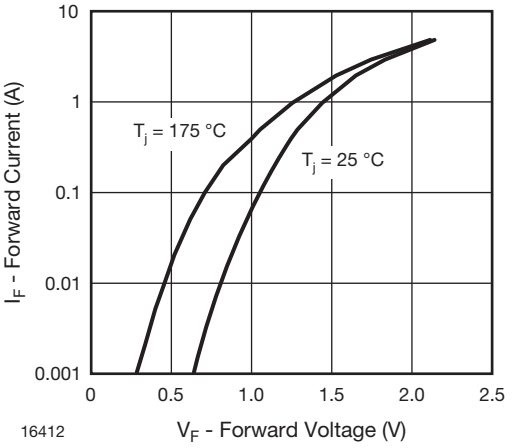

Fig. 2 - Max. Forward Current vs. Forward Voltage

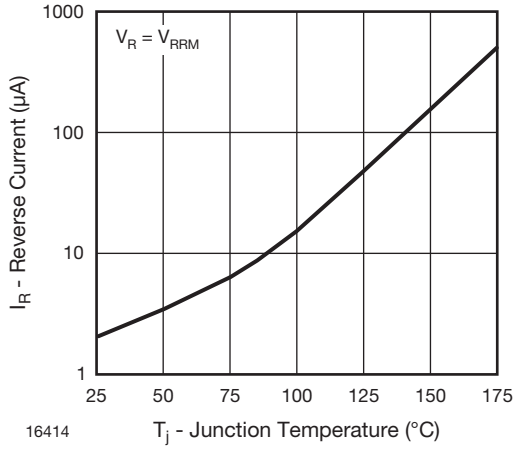

Fig. 4 - Max. Reverse Current vs. Junction Temperature

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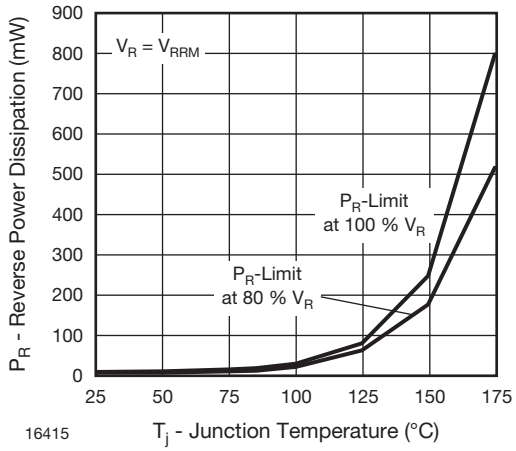


Fig. 5 - Max. Reverse Power Dissipation vs. Junction Temperature

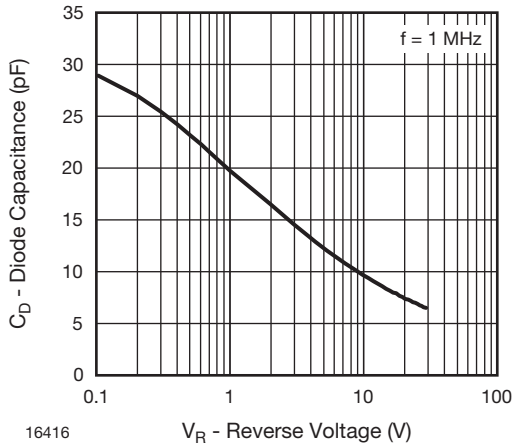
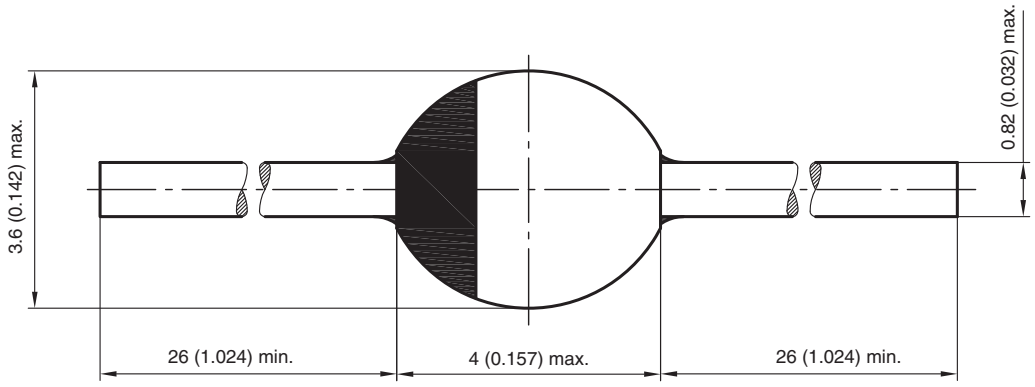


Fig. 6 - Diode Capacitance vs. Reverse Voltage

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



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