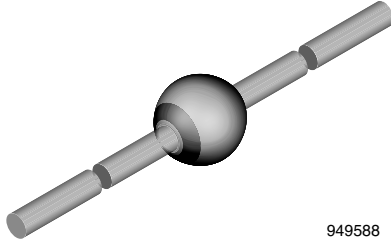


## Standard Avalanche Sinterglass Diode



949588

### FEATURES

- Glass passivated junction
- Hermetically sealed package
- 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**

### APPLICATIONS

- High voltage rectification
- Efficiency diode in horizontal deflection circuit

### MECHANICAL DATA

**Case:** SOD-64

**Terminals:** plated axial leads, solderable per MIL-STD-750, method 2026

**Polarity:** color band denotes cathode end

**Mounting position:** any

**Weight:** approx. 858 mg

### PARTS TABLE

PART	TYPE DIFFERENTIATION	PACKAGE
BY228	$V_R = 1500\text{ V}; I_{FAV} = 3\text{ A}$	SOD-64

### ABSOLUTE MAXIMUM RATINGS ( $T_{amb} = 25\text{ °C}$ , unless otherwise specified)

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Reverse voltage	See electrical characteristics	$V_R$	1500	V
Repetitive peak reverse voltage	$I_R = 100\text{ }\mu\text{A}$	$V_{RRM}$	1650	V
Peak forward surge current	$t_p = 10\text{ ms}$ , half sine wave	$I_{FSM}$	50	A
Average forward current		$I_{FAV}$	3	A
Junction temperature		$T_j$	140	$^{\circ}\text{C}$
Storage temperature range		$T_{stg}$	- 55 to + 175	$^{\circ}\text{C}$
Non repetitive reverse avalanche energy	$I_{(BR)R} = 0.4\text{ A}$	$E_R$	10	mJ

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

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Junction ambient	On PC board with spacing 25 mm	$R_{thJA}$	70	K/W

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

PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX	UNIT
Forward voltage	$I_F = 5\text{ A}$	$V_F$	-	-	1.5	V
Reverse current	$V_R = 1500\text{ V}$	$I_R$	-	2	5	$\mu\text{A}$
	$V_R = 1500\text{ V}, T_j = 140\text{ }^{\circ}\text{C}$	$I_R$	-	-	140	$\mu\text{A}$
Total reverse recovery time	$I_F = 1\text{ A}, -di_F/dt = 0.05\text{ A}/\mu\text{s}$	$t_{rr}$	-	-	20	$\mu\text{s}$
Reverse recovery time	$I_F = 0.5\text{ A}, I_R = 1\text{ A}, i_R = 0.25\text{ A}$	$t_{rr}$	-	-	2	$\mu\text{s}$

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

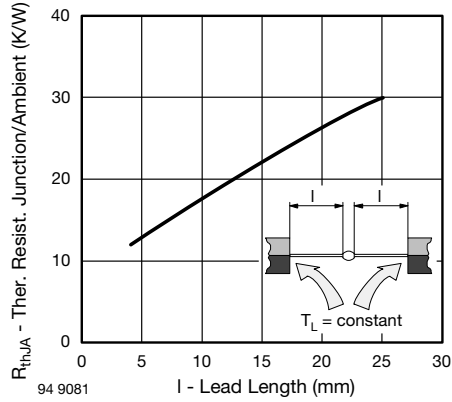


Fig. 1 - Typ. Thermal Resistance vs. Lead Length

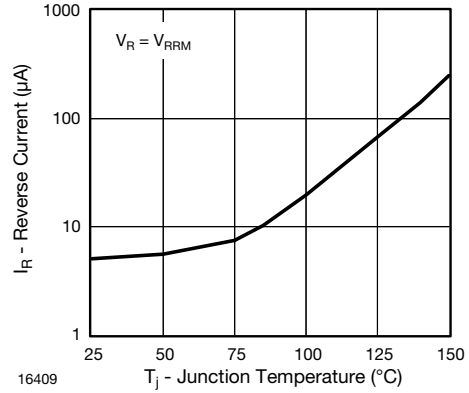


Fig. 4 - Reverse Current vs. Junction Temperature

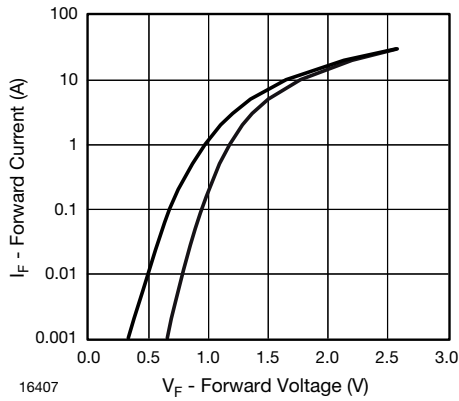


Fig. 2 - Forward Current vs. Forward Voltage

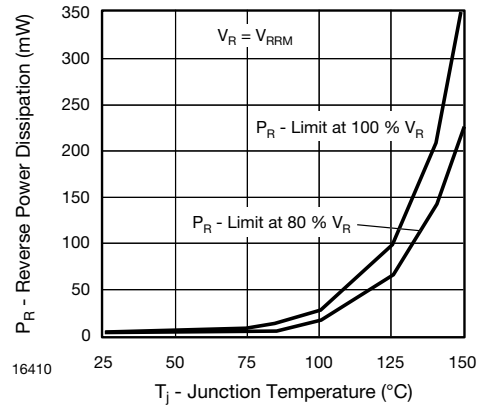


Fig. 5 - Max. Reverse Power Dissipation vs. Junction Temperature

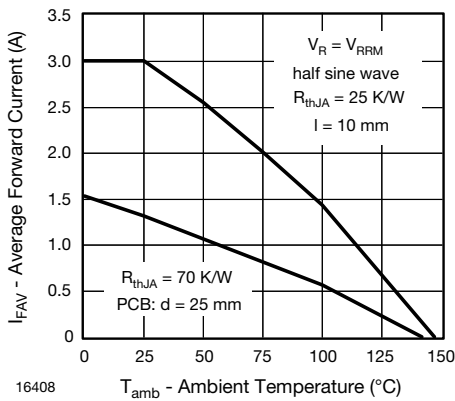


Fig. 3 - Max. Average Forward Current vs. Ambient Temperature

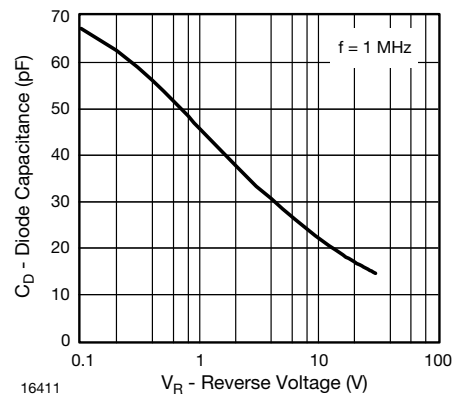
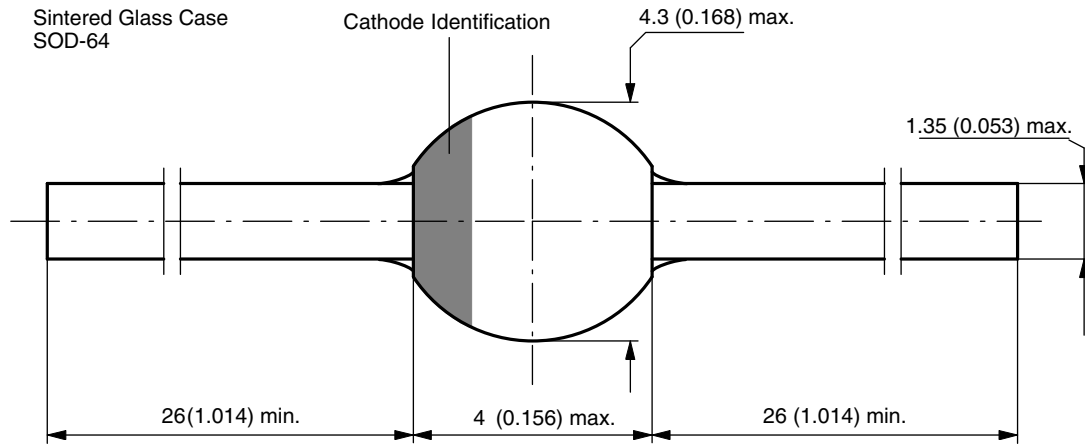


Fig. 6 - Diode Capacitance vs. Reverse Voltage

**PACKAGE DIMENSIONS** in millimeters (inches): **SOD-64**

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94 9587



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