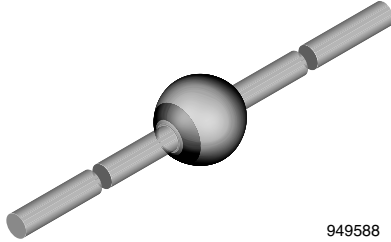


Standard Avalanche Sinterglass Diode



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	μA
	$V_R = 1500\text{ V}$, $T_j = 140\text{ }^{\circ}\text{C}$	I_R	-	-	140	μA
Total reverse recovery time	$I_F = 1\text{ A}$, $-di_F/dt = 0.05\text{ A}/\mu\text{s}$	t_{rr}	-	-	20	μs
Reverse recovery time	$I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $i_R = 0.25\text{ A}$	t_{rr}	-	-	2	μs

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

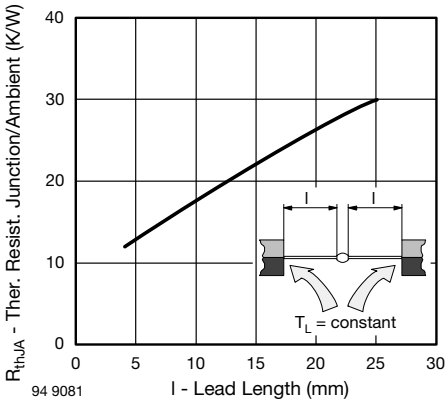


Fig. 1 - Typ. Thermal Resistance vs. Lead Length

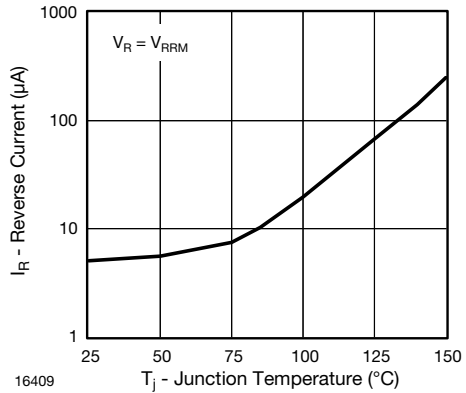


Fig. 4 - Reverse Current vs. Junction Temperature

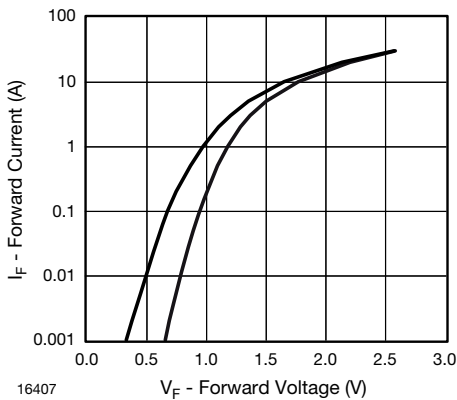


Fig. 2 - Forward Current vs. Forward Voltage

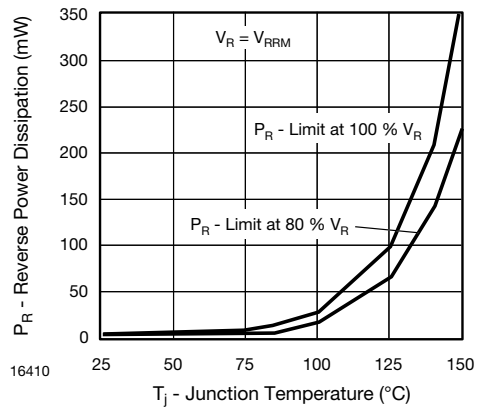


Fig. 5 - Max. Reverse Power Dissipation vs. Junction Temperature

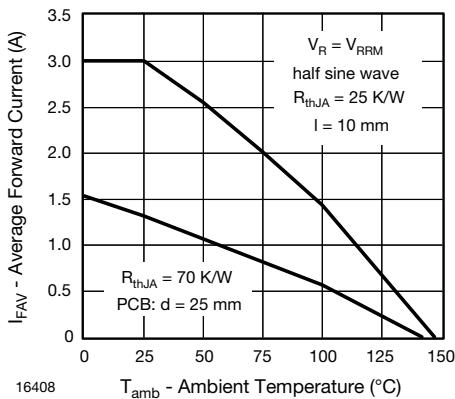


Fig. 3 - Max. Average Forward Current vs. Ambient Temperature

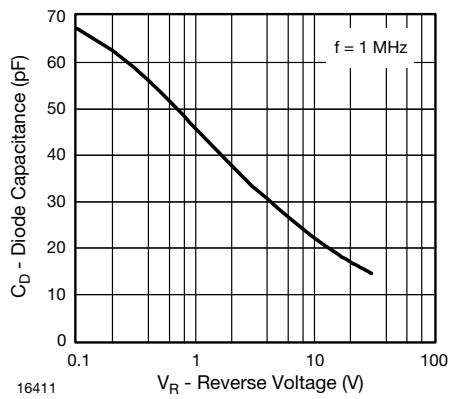
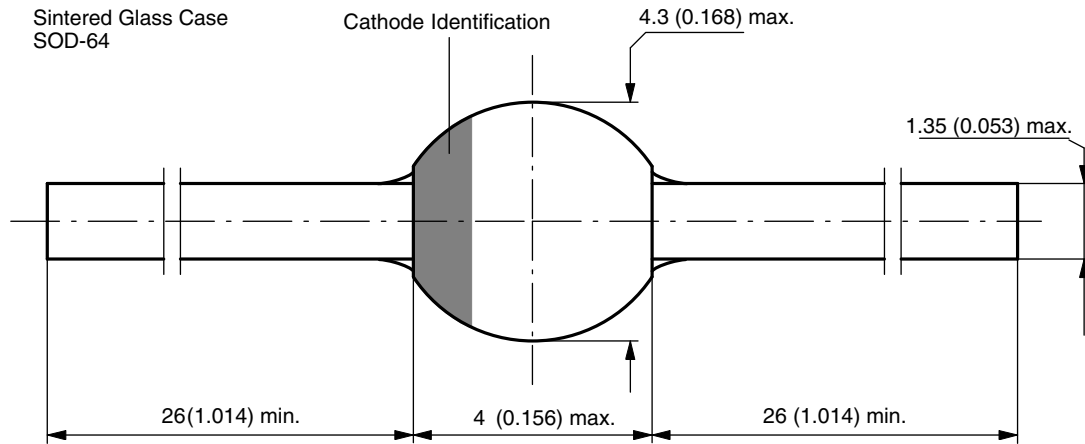


Fig. 6 - Diode Capacitance vs. Reverse Voltage

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

Document-No.: 6.563-5006.4-4
Rev. 3 - Date: 09.February.2005
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