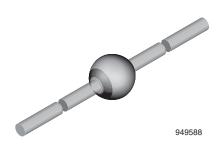


Vishay Semiconductors

Standard Avalanche Sinterglass Diode



FEATURES

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





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

ORDERING INFORMATION (Example)						
DEVICE NAME	ORDERING CODE	TAPED UNITS	MINIMUM ORDER QUANTITY			
BY228	BY228TR	2500 per 10" tape and reel	12 500			
BY228	BY228TAP	2500 per ammopack	12 500			

PARTS TABLE					
PART	TYPE DIFFERENTIATION	PACKAGE			
BY228	V _R = 1500 V; I _{F(AV)} = 3 A	SOD-64			

ABSOLUTE MAXIMUM RATINGS (T _{amb} = 25 °C, unless otherwise specified)						
PARAMETER	TEST CONDITION	PART	SYMBOL	VALUE	UNIT	
Reverse voltage	See electrical characteristics	BY228	V_R	1500	V	
Repetitive peak reverse voltage	I _R = 100 μA		V_{RRM}	1650	V	
Peak forward surge current	t _p = 10 ms, half sine wave		I _{FSM}	50	Α	
Average forward current			I _{F(AV)}	3	Α	
Junction temperature			Tj	140	°C	
Storage temperature range			T _{stg}	- 55 to + 175	°C	
Non repetitive reverse avalanche energy	$I_{(BR)R} = 0.4 A$		E _R	10	mJ	

MAXIMUM THERMAL RESISTANCE (T _{amb} = 25 °C, unless otherwise specified)					
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT	
Junction ambient	On PC board with spacing 25 mm	R_{thJA}	70	K/W	

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ELECTRICAL CHARACTERISTICS (T _{amb} = 25 °C, unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
Forward voltage	I _F = 5 A	V _F	-	-	1.5	V
Reverse current	V _R = 1500 V	I _R	-	2	5	μA
	V _R = 1500 V, T _j = 140 °C	I _R	-	-	140	μA
Total reverse recovery time	$I_F = 1 A$, - $dI_F/dt = 0.05 A/\mu s$	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 °C, unless otherwise specified)

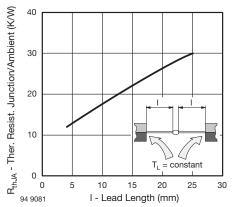


Fig. 1 - Typ. Thermal Resistance vs. Lead Length

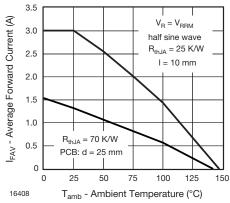


Fig. 3 - Max. Average Forward Current vs. Ambient Temperature

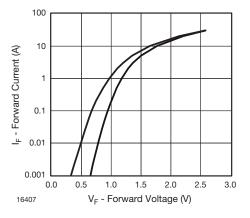


Fig. 2 - Forward Current vs. Forward Voltage

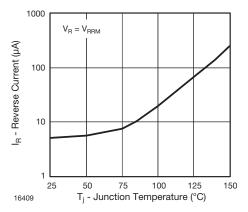


Fig. 4 - Reverse Current vs. Junction Temperature





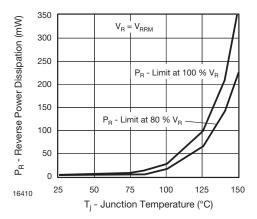


Fig. 5 - Max. Reverse Power Dissipation vs. Junction Temperature

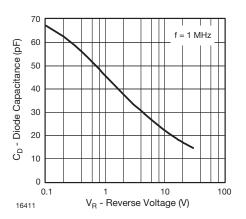
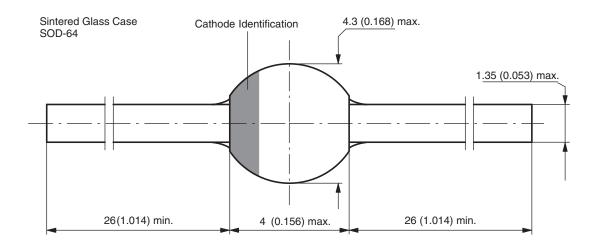


Fig. 6 - Diode Capacitance vs. Reverse Voltage

PACKAGE DIMENSIONS in millimeters (inches): SOD-64



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