

# **Excellent Integrated System Limited**

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Vishay Semiconductor/Diodes Division BYT62-TAP

For any questions, you can email us directly: <u>sales@integrated-circuit.com</u>

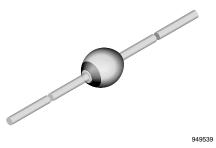




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Vishay Semiconductors

## **Standard Avalanche Sinterglass Diode**



#### **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

#### FEATURES

- Glass passivated junction
- Hermetically sealed package
- Controlled avalanche characteristics
- Low reverse current
- Material categorization: For definitions of compliance please see <u>www.vishay.com/doc?99912</u>

#### **APPLICATIONS**

• High voltage rectification diode

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 <sub>R</sub> = 2400 V; I <sub>F(AV)</sub> = 350 mA	SOD-57			

ABSOLUTE MAXIMUM RATINGS (T <sub>amb</sub> = 25 °C, unless otherwise specified)					
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT	
Reverse voltage = repetitive peak reverse voltage	See electrical characteristics	$V_{R} = V_{RRM}$	2400	V	
Peak forward surge current	t <sub>p</sub> = 10 ms, half sine wave	I <sub>FSM</sub>	10	А	
Average forward current	$R_{thJA} \le 60 \text{ K/W}$	I <sub>F(AV)</sub>	350	mA	
Non repetitive reverse avalanche energy	$I_{(BR)R} = 1$ A, inductive load	E <sub>R</sub>	60	mJ	
Junction temperature		Tj	175	°C	
Storage temperature range		T <sub>stg</sub>	- 55 to + 190	°C	

<b>MAXIMUM THERMAL RESISTANCE</b> (T <sub>amb</sub> = 25 °C, unless otherwise specified)					
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT	
Junction ambient	Lead length I = 10 mm, $T_L$ = constant	R <sub>thJA</sub>	60	K/W	

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COMPLIANT

HALOGEN

FREE

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<b>ELECTRICAL CHARACTERISTICS</b> (T <sub>amb</sub> = 25 °C, unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX	UNIT
Forward voltage	I <sub>F</sub> = 200 mA	V <sub>F</sub>	-	-	3	V
	I <sub>F</sub> = 1 A	VF	-	-	3.6	V
Forward voltage	I <sub>F</sub> = 1 A, T <sub>j</sub> = 175 °C	VF	-	-	2.9	V
	I <sub>F</sub> = 1 A, T <sub>j</sub> = - 40 °C	VF	-	-	4	V
Reverse current	$V_{R} = V_{RRM}$	I <sub>R</sub>	-	-	5	μA
	$V_R = V_{RRM}, T_j = 175 \text{ °C}$	I <sub>R</sub>	-	-	250	μA
	$V_R = V_{RRM}, T_j = -40 \ ^\circ C$	I <sub>R</sub>	-	-	400	nA
Reverse breakdown voltage	I <sub>R</sub> = 100 μA	V <sub>(BR)R</sub>	2500	-	-	V
Reverse recovery time	$I_F = 0.5 \text{ A}, I_R = 1 \text{ A}, I_R = 0.25 \text{ A}$	t <sub>rr</sub>	-	-	5	μs

#### TYPICAL CHARACTERISTICS (Tamb = 25 °C, unless otherwise specified)

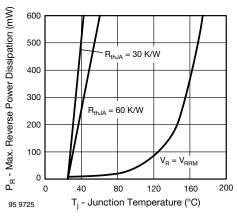


Fig. 1 - Max. Reverse Power Dissipation vs. Junction Temperature

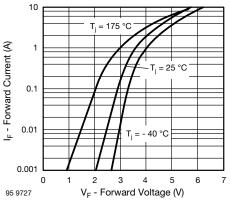


Fig. 3 - Max. Forward Current vs. Forward Voltage

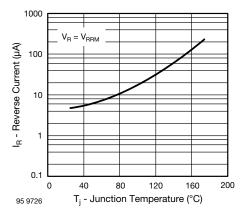


Fig. 2 - Max. Reverse Current vs. Junction Temperature

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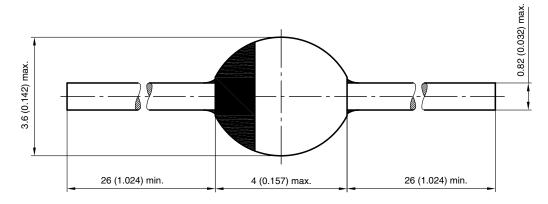


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#### PACKAGE DIMENSIONS in millimeters (inches): SOD-57



20543

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