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# BYV26C-TAP

**Vishay Semiconductors** 

Rectifiers 1 Amp 600 Volt 30 Amp IFSM

Any questions, please feel free to contact us. info@kaimte.com



### BYV26A, BYV26B, BYV26C, BYV26D, BYV26E

Vishay Semiconductors

## **Ultra-Fast Avalanche Sinterglass Diode**



949539

#### **FEATURES**

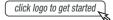
- · Glass passivated junction
- · Hermetically sealed package
- Very low switching losses
- · Low reverse current
- · High reverse voltage
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

# Pb



COMPLIANT HALOGEN

#### **DESIGN SUPPORT TOOLS**





#### **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

#### **APPLICATIONS**

- Switched mode power supplies
- High-frequency inverter circuits

ORDERING INFORMATION (Example)					
DEVICE NAME	ORDERING CODE	RDERING CODE TAPED UNITS MINIMUM ORDER QUANTITY			
BYV26E	BYV26E-TR	5000 per 10" tape and reel	25 000		
BYV26E	BYV26E-TAP	5000 per ammopack	25 000		

PARTS TABLE					
PART	TYPE DIFFERENTIATION	PACKAGE			
BYV26A	V <sub>R</sub> = 200 V; I <sub>F(AV)</sub> = 1 A	SOD-57			
BYV26B	$V_R = 400 \text{ V}; I_{F(AV)} = 1 \text{ A}$	SOD-57			
BYV26C	V <sub>R</sub> = 600 V; I <sub>F(AV)</sub> = 1 A	SOD-57			
BYV26D	V <sub>R</sub> = 800 V; I <sub>F(AV)</sub> = 1 A	SOD-57			
BYV26E	V <sub>R</sub> = 1000 V; I <sub>F(AV)</sub> = 1 A	SOD-57			

ABSOLUTE MAXIMUM RATINGS (T <sub>amb</sub> = 25 °C, unless otherwise specified)							
PARAMETER	TEST CONDITION	PART	SYMBOL	VALUE	UNIT		
	See electrical characteristics	BYV26A	$V_R = V_{RRM}$	200	V		
		BYV26B	$V_R = V_{RRM}$	400	V		
Reverse voltage = repetitive peak reverse voltage		BYV26C	$V_R = V_{RRM}$	600	V		
vollage		BYV26D	$V_R = V_{RRM}$	800	V		
		BYV26E	$V_R = V_{RRM}$	1000	V		
Peak forward surge current	$t_p = 10$ ms, half sine wave		I <sub>FSM</sub>	30	Α		
Average forward current			I <sub>F(AV)</sub>	1	Α		
Non repetitive reverse avalanche energy	I <sub>(BR)R</sub> = 1 A, inductive load		E <sub>R</sub>	10	mJ		
Junction and storage temperature range			$T_j = T_{stg}$	-55 to +175	°C		

### BYV26A, BYV26B, BYV26C, BYV26D, BYV26E

### Vishay Semiconductors

MAXIMUM THERMAL RESISTANCE (T <sub>amb</sub> = 25 °C, unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT		
Junction ambient	I = 10 mm, T <sub>L</sub> = constant	R <sub>thJA</sub>	45	K/W		

<b>ELECTRICAL CHARACTERISTICS</b> (T <sub>amb</sub> = 25 °C, unless otherwise specified)							
PARAMETER	TEST CONDITION	PART	SYMBOL	MIN.	TYP.	MAX.	UNIT
Forward voltage	I <sub>F</sub> = 1 A		$V_{F}$	-	-	2.5	V
	I <sub>F</sub> = 1 A, T <sub>j</sub> = 175 °C		$V_{F}$	-	-	1.3	V
Reverse current	$V_R = V_{RRM}$		I <sub>R</sub>	ı	-	5	μΑ
	$V_R = V_{RRM}$ , $T_j = 150$ °C		I <sub>R</sub>	ı	-	100	μΑ
	I <sub>R</sub> = 100 μA	BYV26A	V <sub>(BR)R</sub>	300	-	-	V
		BYV26B	V <sub>(BR)R</sub>	500	-	-	V
Reverse breakdown voltage		BYV26C	V <sub>(BR)R</sub>	700	-	-	V
		BYV26D	V <sub>(BR)R</sub>	900	-	-	V
		BYV26E	V <sub>(BR)R</sub>	1100	-	-	V
Reverse recovery time	I <sub>F</sub> = 0.5 A, I <sub>R</sub> = 1 A, i <sub>R</sub> = 0.25 A	BYV26A	t <sub>rr</sub>	-	-	30	ns
		BYV26B	t <sub>rr</sub>	-	-	30	ns
		BYV26C	t <sub>rr</sub>	ı	-	30	ns
		BYV26D	t <sub>rr</sub>	ı	-	75	ns
		BYV26E	t <sub>rr</sub>	-	-	75	ns

#### **TYPICAL CHARACTERISTICS** (T<sub>amb</sub> = 25 °C, unless otherwise specified)

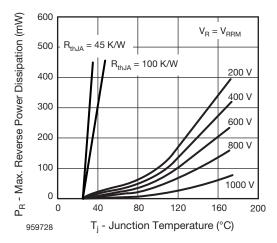


Fig. 1 - Max. Reverse Power Dissipation vs. Junction Temperature

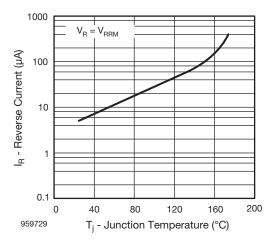


Fig. 2 - Max. Reverse Current vs. Junction Temperature

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f = 1 MHz

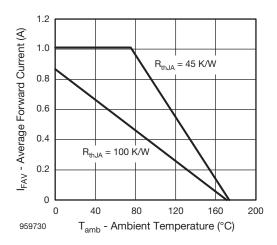
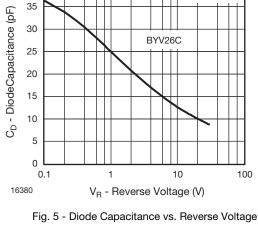


Fig. 3 - Max. Average Forward Current vs. Ambient Temperature



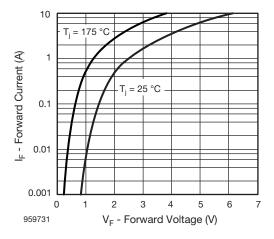


Fig. 4 - Max. Reverse Current vs. Junction Temperature

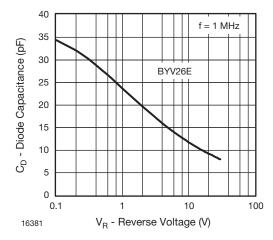
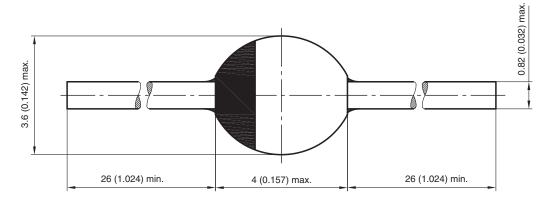


Fig. 6 - Diode Capacitance vs. Reverse Voltage

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



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