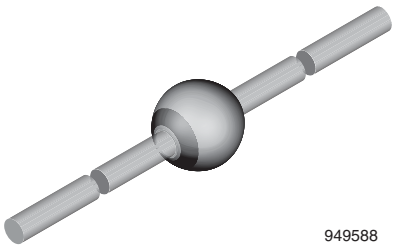
BYM36A, BYM36B, BYM36C, BYM36D, BYM36E

Fast Avalanche Sinterglass Diode



FEATURES

- Glass passivated
- 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 e2 RoHS COMPLIANT HALOGEN FREE

DESIGN SUPPORT TOOLS

click logo to get started

3D Models Available

APPLICATIONS

- Switched mode power supplies
- High-frequency inverter circuits

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**
BYM36E	BYM36E-TR	2500 per 10" tape and reel	12 500
BYM36E	BYM36E-TAP	2500 per ammopack	12 500

PARTS TABLE		
PART	**TYPE DIFFERENTIATION**	**PACKAGE**
BYM36A	V_R = 200 V; $I_{F(AV)}$ = 3 A	SOD-64
BYM36B	V_R = 400 V; $I_{F(AV)}$ = 3 A	SOD-64
BYM36C	V_R = 600 V; $I_{F(AV)}$ = 3 A	SOD-64
BYM36D	V_R = 800 V; $I_{F(AV)}$ = 2.9 A	SOD-64
BYM36E	V_R = 1000 V; $I_{F(AV)}$ = 2.9 A	SOD-64

ABSOLUTE MAXIMUM RATINGS (T_{amb} = 25 °C, unless otherwise specified)					
PARAMETER	**TEST CONDITION**	**PART**	**SYMBOL**	**VALUE**	**UNIT**
Reverse voltage = repetitive peak reverse voltage	See electrical characteristics	BYM36A	$V_R = V_{RRM}$	200	V
		BYM36B	$V_R = V_{RRM}$	400	V
		BYM36C	$V_R = V_{RRM}$	600	V
		BYM36D	$V_R = V_{RRM}$	800	V
		BYM36E	$V_R = V_{RRM}$	1000	V
Peak forward surge current	t_p = 10 ms, half sine wave		I_{FSM}	65	A
Average forward current		BYM36A	$I_{F(AV)}$	3	A
		BYM36B	$I_{F(AV)}$	3	A
		BYM36C	$I_{F(AV)}$	3	A
		BYM36D	$I_{F(AV)}$	2.9	A
		BYM36E	$I_{F(AV)}$	2.9	A
Non repetitive reverse avalanche energy	$I_{(BR)R}$ = 1 A, inductive load		E_R	20	mJ
Junction and storage temperature range			$T_j = T_{stg}$	-55 to +175	°C

MAXIMUM THERMAL RESISTANCE (T_{amb} = 25 °C, unless otherwise specified)				
PARAMETER	**TEST CONDITION**	**SYMBOL**	**VALUE**	**UNIT**
Junction ambient	Lead length l = 10 mm, T_L = constant	R_{thJA}	25	K/W
	On PC board with spacing 25 mm	R_{thJA}	70	K/W

ELECTRICAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)							
PARAMETER	**TEST CONDITION**	**PART**	**SYMBOL**	**MIN.**	**TYP.**	**MAX.**	**UNIT**
Forward voltage	I_F = 3 A	BYM36A	V_F	-	-	1.6	V
		BYM36B	V_F	-	-	1.6	V
		BYM36C	V_F	-	-	1.6	V
		BYM36D	V_F	-	-	1.78	V
		BYM36E	V_F	-	-	1.78	V
	I_F = 3 A, T_j= 175 °C	BYM36A	V_F	-	-	1.22	V
		BYM36B	V_F	-	-	1.22	V
		BYM36C	V_F	-	-	1.22	V
		BYM36D	V_F	-	-	1.28	V
		BYM36E	V_F	-	-	1.28	V
Reverse current	$V_R = V_{RRM}$		I_R	-	-	5	µA
	$V_R = V_{RRM}$, T_j = 150 °C		I_R	-	-	100	µA
Reverse recovery time	I_F = 0.5 A, I_R = 1 A, i_R = 0.25 A	BYM36A	t_{rr}	-	-	100	ns
		BYM36B	t_{rr}	-	-	100	ns
		BYM36C	t_{rr}	-	-	100	ns
		BYM36D	t_{rr}	-	-	150	ns
		BYM36E	t_{rr}	-	-	150	ns
Reverse breakdown voltage	I_R = 100 µA	BYM36A	$V_{(BR)R}$	300	-	-	V
		BYM36B	$V_{(BR)R}$	500	-	-	V
		BYM36C	$V_{(BR)R}$	700	-	-	V
		BYM36D	$V_{(BR)R}$	900	-	-	V
		BYM36E	$V_{(BR)R}$	1100	-	-	V

TYPICAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)

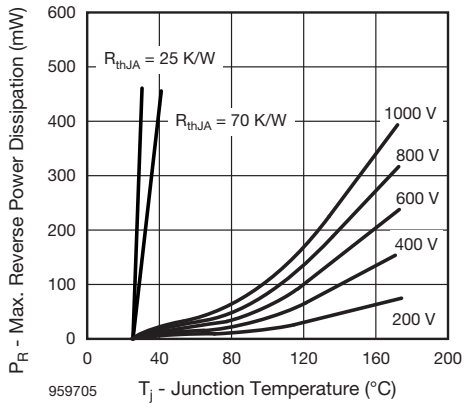


Fig. 1 - Max. Reverse Power Dissipation vs. Junction Temperature

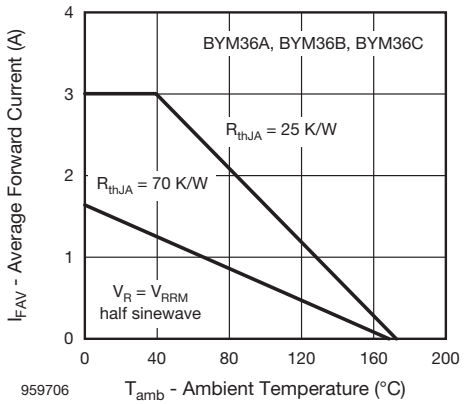


Fig. 2 - Max. Average Forward Current vs. Ambient Temperature

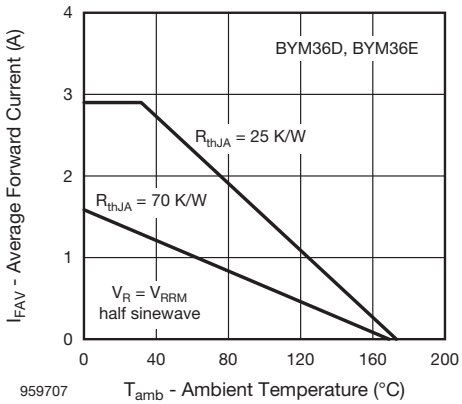


Fig. 3 - Max. Average Forward Current vs. Ambient Temperature

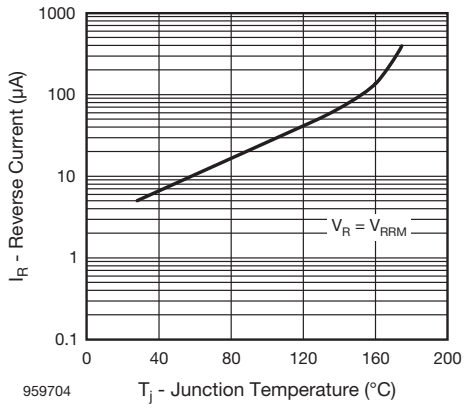


Fig. 6 - Max. Forward Current vs. Forward Voltage

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

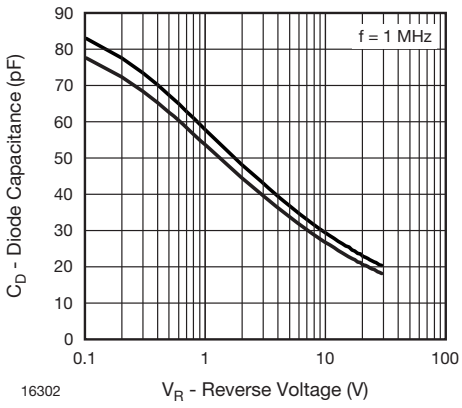


Fig. 7 - Diode Capacitance vs. Reverse Voltage

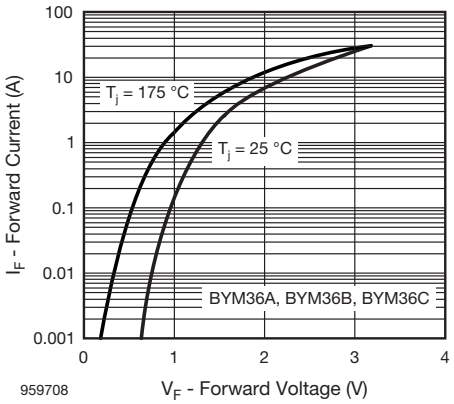
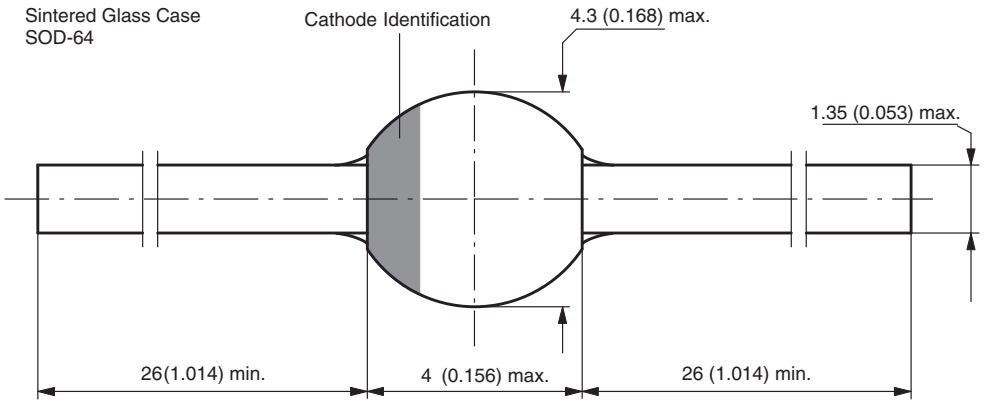


Fig. 5 - Max. Forward Current vs. Forward Voltage

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



Document-No.: 6.563-5006.4-4
Rev. 3 - Date: 09.February.2005
94 9587

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, “Vishay”), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

单击下面可查看定价，库存，交付和生命周期等信息

>>Vishay(威世)