

Single Phase Glass Passivated Bridge Rectifiers

Reverse Voltage: 50V to 1000V
Forward Current: 2.0 Amp

Features

- Glass passivated chip junction
- Ideal for automated placement
- Low leakage current
- High forward surge capability
- Moisture sensitivity level: level 1, per J-STD-020

Mechanical Data

• Package: DBS

Molding compound meets UL 94 V-0 flammability rating

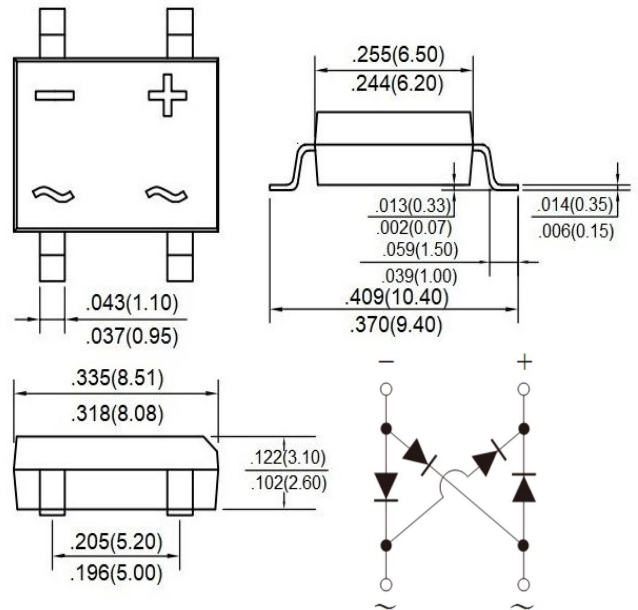
• Terminals: Matte tin plated leads, solderable per MIL-STD-750, Method 2026

• Polarity: Symbol marking on body

Typical Applications

Suitable for AC to DC bridge full wave rectification for SMPS, LED lighting, adapter, battery charger, home appliances, office equipment, and telecommunication applications.

DBS



Package Outline Dimensions in Inches (Millimeters)

Maximum Ratings and Electrical Characteristics (Ta=25°C Unless otherwise specified)

Parameter&Test Conditions	SYM.	DB201S	DB202S	DB203S	DB204S	DB205S	DB206S	DB207S	Unit
Device marking code		DB201S	DB202S	DB203S	DB204S	DB205S	DB206S	DB207S	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Output Rectified Current (see Fig. 1)	I _{O(AV)}	2.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed On Rated Load	I _{FSM}	50							A
Operating junction range	T _J	-55 to +150							°C
Storage temperature range	T _{STG}	-55 to +150							°C

Thermal Characteristics (Ta=25°C Unless otherwise specified)

Parameter&Test Conditions	SYM.	DB201S	DB202S	DB203S	DB204S	DB205S	DB206S	DB207S	Unit
Maximum Thermal Resistance per Leg, Junction To Lead (Note 1)	R _{θJL}	15							°C/W
Maximum Thermal Resistance per Leg, Junction To Ambient (Note 1)	R _{θJA}	40							°C/W

Electrical Characteristics (Ta=25°C Unless otherwise specified)

Parameter&Test Conditions		SYM.	DB201S	DB202S	DB203S	DB204S	DB205S	DB206S	DB207S	Unit
Maximum Instantaneous Forward Voltage per diode	IF= 2A	V _{FM}	1.10							V
Maximum DC reverse current at rated DC blocking voltage per diode	T _A = 25℃	I _R	5							μA
	T _A = 125℃		100							

Notes:

1. Thermal resistance from junction to ambient and from junction to lead mounted on PCB with 0.5" x 0.5" (13 mm x 13 mm) copper pads.

Rating and Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED

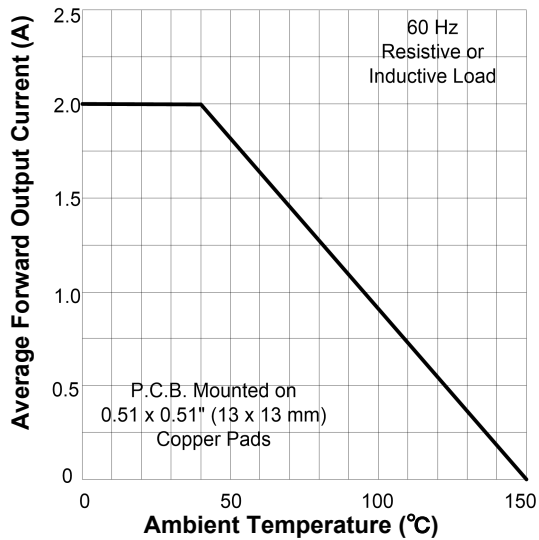


FIG. 2- -MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT Per Diode

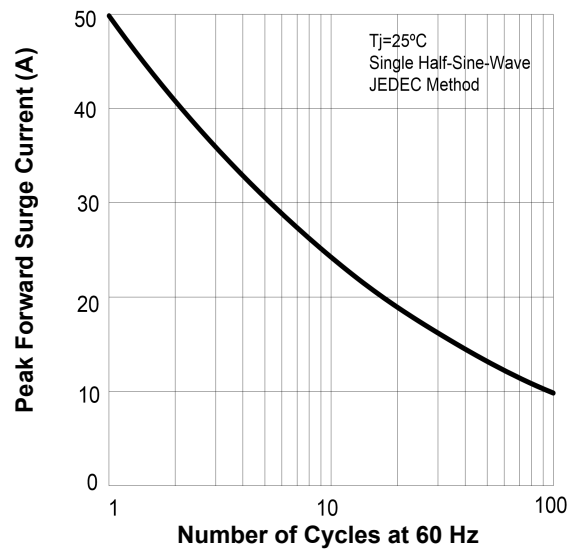


FIG. 3- TYPICAL FORWARD VOLTAGE

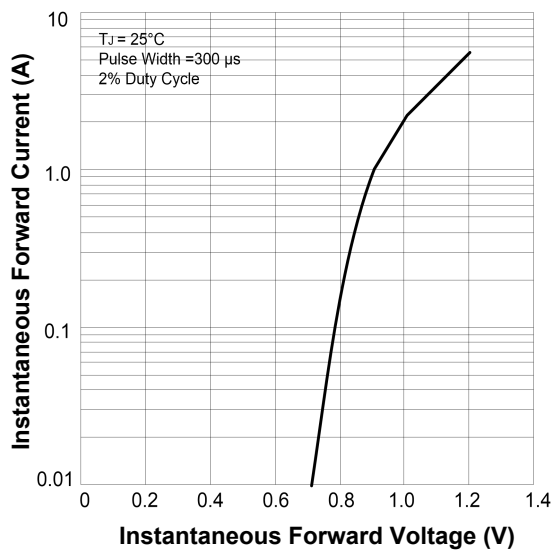
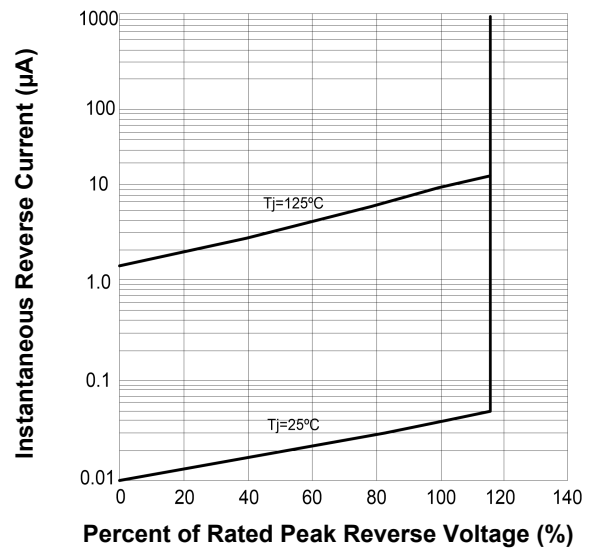


FIG. 4- TYPICAL REVERSE LEAKAGE CHARACTERISTICS



The curve above is for reference only.



Legal Disclaimer Notice

All specifications are subject to be changed without notice to improve reliability function, design, etc. JUXIN makes no warranty, or guarantee regarding the suitability of the products for any purpose. To the extent permitted by applicable law, JUXIN 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.

Statements regarding the suitability of products for certain types of applications are based on JUXIN's ideas of typical requirements that are often placed on JUXIN 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 a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and specifications may differ 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 JUXIN's terms and conditions of purchase, including but not limited to the warranty expressed therein. Except as expressly indicated in writing, JUXIN products are not designed for use in medical, life saving, or life-sustaining applications or for any other applications in which the failure of the JUXIN product could result in personal injury or death. Customers using or selling JUXIN products not expressly indicated for use in such applications do so at their own risk. Please contact authorized JUXIN personnel to obtain written terms and conditions regarding products designed for such applications.

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