# **DB201S THRU DB207S**

# Surface Mount Glass Passivated Bridge Rectifiers

# Reverse Voltage - 50 to 1000 Volts Forward Current - 2.0 Amperes

#### **Features**

- Glass passivated chip
- Ideal for automatic placement
- High surge forward current capability
- Reliable low cost construction utilizing molded plastic technique
- Lead tin plated copper
- Meet UL flammability classification 94V-0

#### **Mechanical Data**

- Polarity: Symbol marked on body
- Mounting position: Any

Note: Products with logo



are made by HY Electronic (Cayman) Limited.

### **Applications**

 General purpose use in AC/DC bridge full wave rectification, for SMPS, lighting ballaster, adapter, etc.

# **DBS** RoHS COMPLIAN .047 (1.2) .037 (0.95) .335 (8.5) .307 (7.8) + .256 (6.5) .244 (6.2) .406 (10.3) .391 (10.0) .140 (0.35) .008 (0.2) .346 (8.8) .323 (8.2) .134 (3.4) .122 (3.1) .205 (5.2) .013 (0.330) .003 (0.076) .197 (5.0)

#### Package Outline Dimensions in Inches (Millimeters)

# Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	DB201S	DB202S	DB203S	DB204S	DB205S	DB206S	DB207S	Unit
Maximum Repetitive Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @Ta=40 $^{\circ}$ C	I(AV)	2.0							Α
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave,	IFSM	60							А
Superimposed on Rated Load (JEDEC Method)	IPSW 00								
I <sup>2</sup> t Rating for Fusing (t<8.3mS)	l <sup>2</sup> t	14.9						A <sup>2</sup> s	
Peak Forward Voltage per Diode at 2.0A DC	VF	1.1							V
Maximum DC Reverse Current at Rated @TJ=25°C	lr	10							μА
DC Blocking Voltage per Diode @TJ=125°C	IK	500							
Typical Junction Capacitance (Note1)	Cı	25							pF
Typical Thermal Resistance Junction to Ambient (Note2)	Reja		40						
Operating Junction Temperature Range	TJ		-55 to +150						
Storage Temperature Range	Тѕтс	-55 to +150							$^{\circ}$

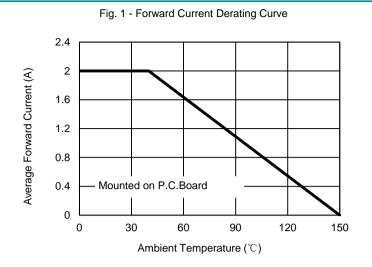
Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

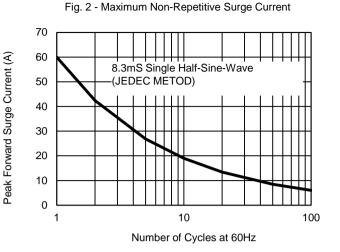
- 2. Thermal resistance from junction to ambient mounted on P.C.B ,with 0.5\*0.5"(13\*13mm) copper pads.
- 3. The typical data above is for reference only .

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Rev. 11, 18-May-2020









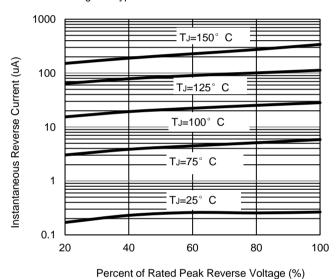
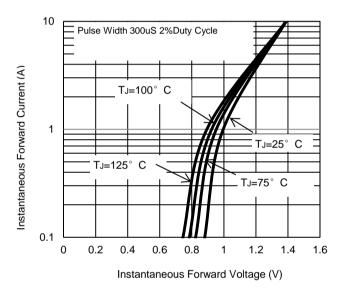
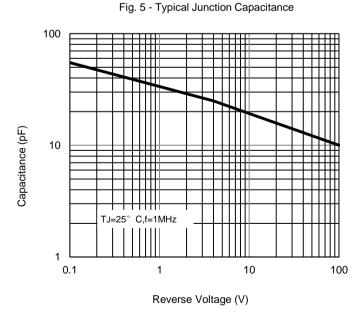


Fig. 4 - Typical Forward Characteristics



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The curve above is for reference only.

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