



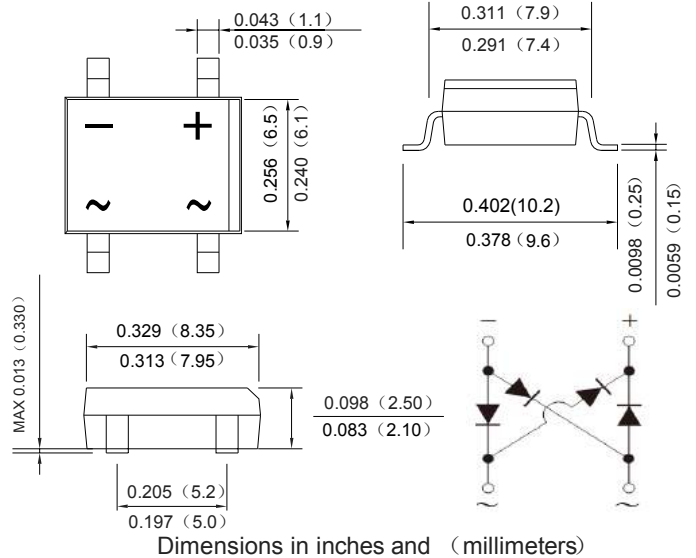
# DB201S THRU DB207S

SINGLE PHASE 2.0AMP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

## Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0

## DB-S



## Mechanical Data

- Case: DB-S, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Marking: type number
- Lead Free: For RoHS / Lead Free Version

## 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%.

TYPE NUMBER	SYMBOL	DB201S	DB202S	DB203S	DB204S	DB205S	DB206S	DB207S	UNITS	
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>									
Working Peak Reverse Voltage	V <sub>RWM</sub>	50	100	200	400	600	800	1000	V	
DC Blocking Voltage	V <sub>DC</sub>									
RMS Reverse Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V	
Average Rectified Output Current (Note 1)@T <sub>c</sub> =100°C	I <sub>F(AV)</sub>	2.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	60								A
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	I <sup>2</sup> t	14.94								A <sup>2</sup> s
Forward Voltage per element @I <sub>F</sub> =2.0A	V <sub>FM</sub>	1.0								V
Peak Reverse Current @T <sub>J</sub> =25°C At Rated DC Blocking Voltage @T <sub>J</sub> =125°C	I <sub>R</sub>	5.0 100								uA
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	25								pF
Typical Thermal Resistance	R <sub>θJA</sub>	40								°C/W
	R <sub>θJL</sub>	15								
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55to+150								°C

Note:1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



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Fig. 1 Output Current Derating Curve

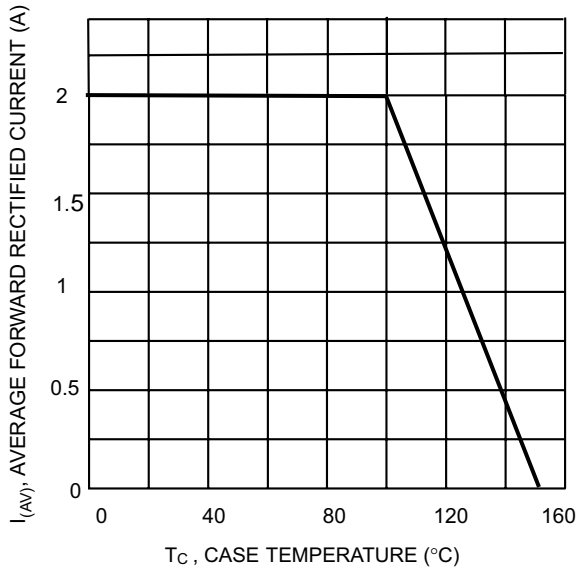


Fig. 2 Typical Forward Characteristics

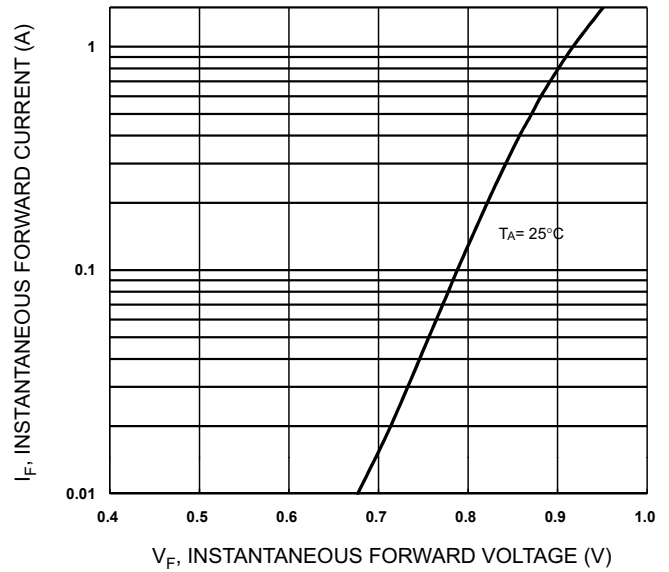


Fig. 3 Maximum Peak Forward Surge Current

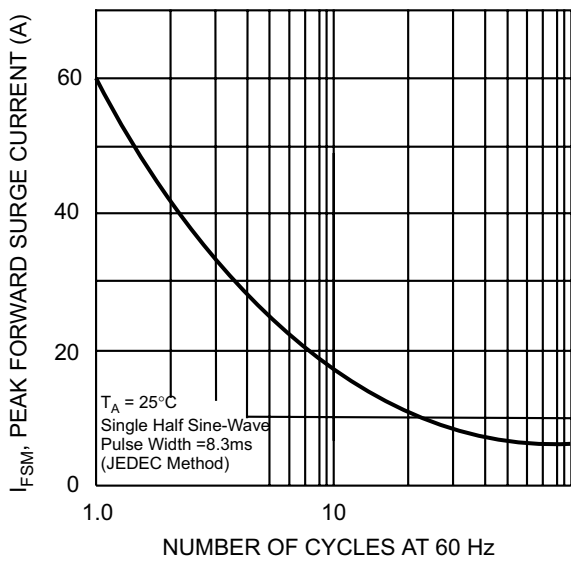


Fig. 4 Typical Reverse Characteristics

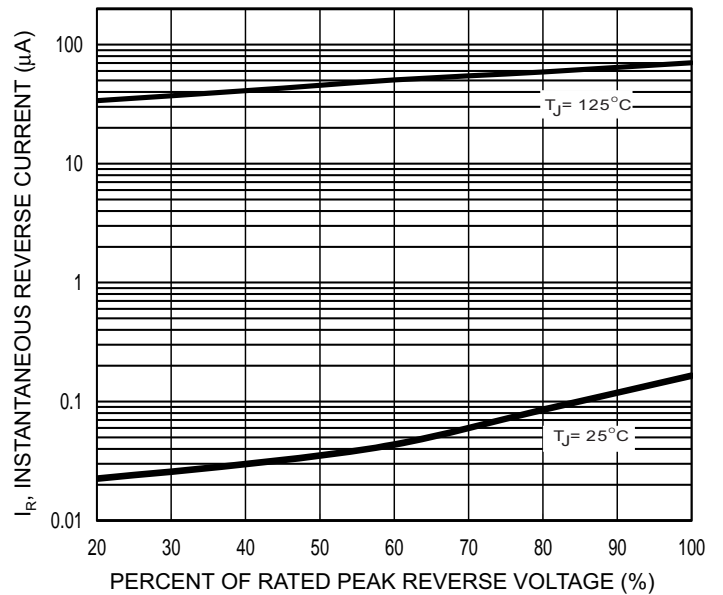


Fig. 5 Typical Junction Capacitance

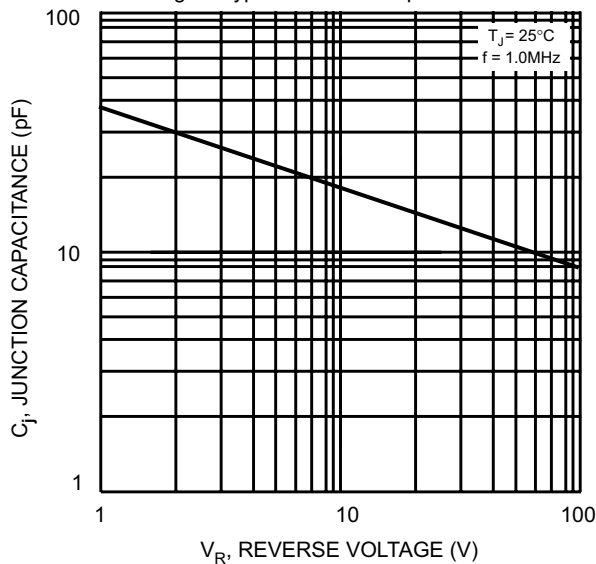
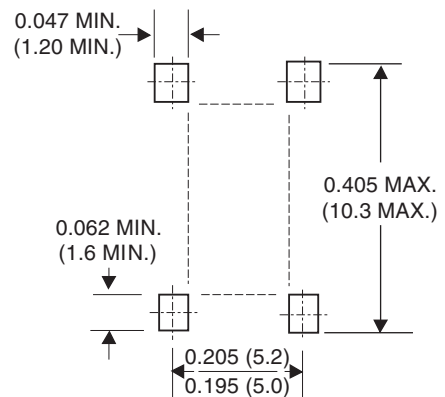


FIG.6 MOUNTING PAD LAYOUT





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