

# RDB105S

**SINGLE PHASE GLASS PASSIVATED  
FAST RECOVERY  
SURFACE MOUNT BRIDGE RECTIFIER  
VOLTAGE:600V CURRENT:1.0A**

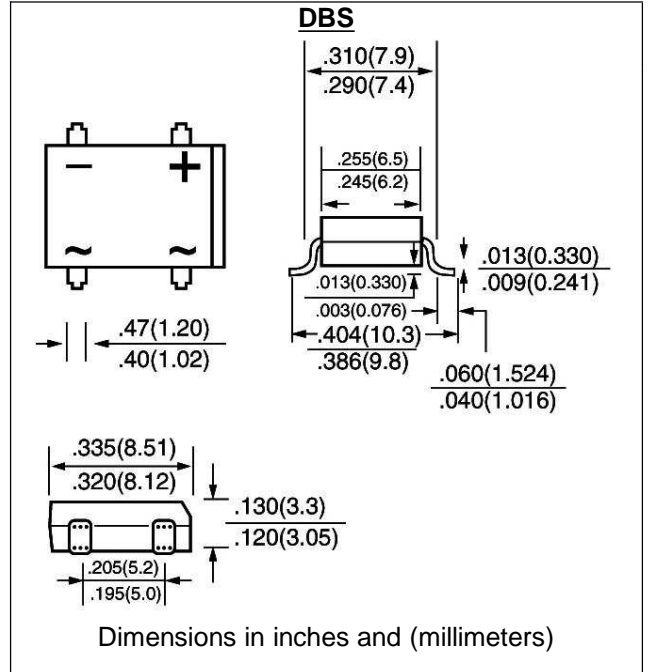


## FEATURE

For surface mount application  
Reliable low cost construction utilizing molded plastic  
Technique

## MECHANICAL DATA

Terminal: Plated leads solderable per  
MIL-STD 202E, method 208C  
Case:UL-94 Class V-0 recognized Flame Retardant Epoxy  
Polarity: Polarity symbol marked on body  
Mounting position: any



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

	SYMBOL	RDB 105S	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	600	V
Maximum RMS Voltage	V <sub>rms</sub>	420	V
Maximum DC blocking Voltage	V <sub>dc</sub>	600	V
Maximum Average Forward Rectified Current at Ta =40°C	I <sub>f(av)</sub>	1.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	30.0	A
Maximum Instantaneous Forward Voltage at forward current 1.0A	V <sub>f</sub>	1.3	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I <sub>r</sub>	10.0 500.0	μA mA
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	250	nS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	25.0	Pf
Operating Temperature Range	T <sub>j</sub>	-55 to +125	°C
Storage and Operating Junction Temperature	T <sub>stg</sub>	-55 to +150	°C

### Note:

- Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A
- Measured at 1.0 MHz and applied voltage of 4.0 volt

# RATINGS AND CHARACTERISTIC CURVES RDB105S

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Figure 1. Maximum Forward Current Derating Curve

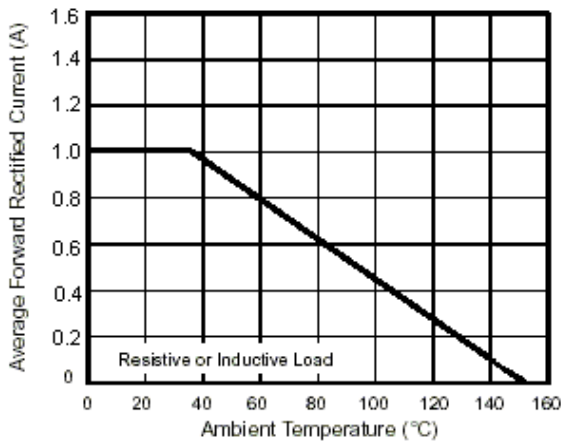


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

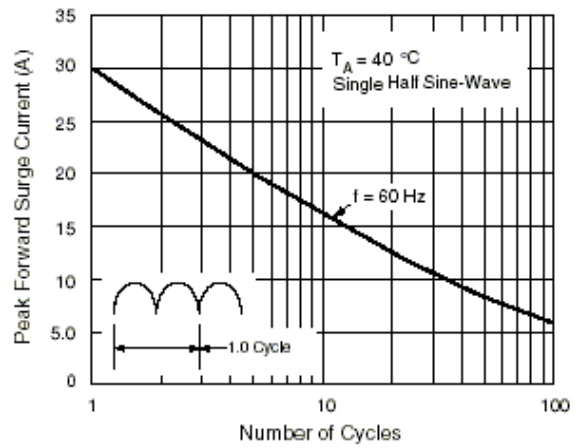


Figure 3. Typical Instantaneous Forward Characteristics Per Leg

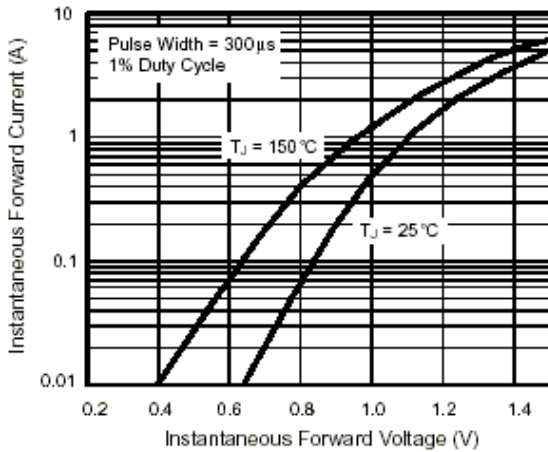


Figure 4. Typical Reverse Leakage Characteristics Per Leg

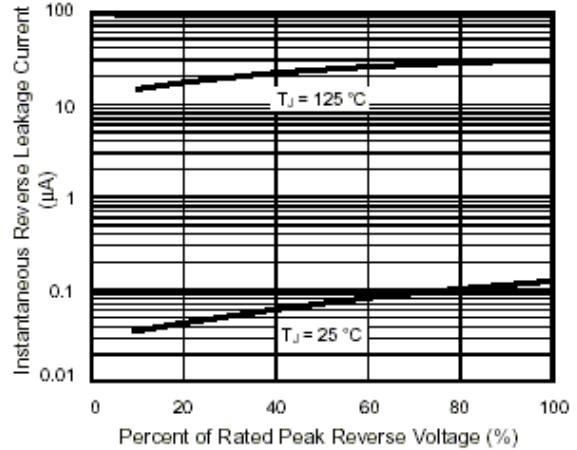


Figure 5. Typical Junction Capacitance Per Leg

