



# RBS2005 thru RBS210

## 2A, Fast Recovery Glass Passivated Bridge Rectifier

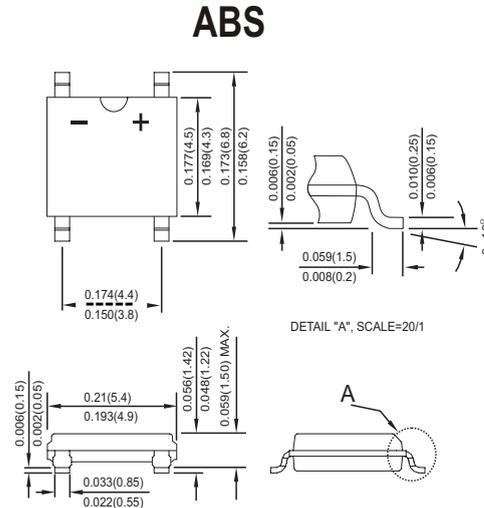
Rectifier Reverse Voltage 200 to 1000V

### Features

- This series is UL listed under the Recognized Component Index, file number E142814
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Ideal for printed circuit board application
- High temperature soldering guaranteed 260 °C /5 seconds at 5 lbs (2.3kg) tension

### Mechanical Data

Case: Molded plastic  
 Terminals: Plated leads solderable per MIL-STD-202, Method 208  
 Polarity: Marked on body  
 Mounting Position: Any



Dimensions in millimeters ( 1mm =0.0394" )

### Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.  
 For Capacitive load derate current by 20%.

Parameter	Symbol	RBS 202	RBS 204	RBS 206	RBS 208	RBS 210	unit
Maximum repetitive peak reverse voltage	VRRM	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	200	400	600	800	1000	V
Maximum average forward rectified output current at TA=40°C	IF(AV)	2					A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	50					A
Rating for fusing ( t<8.3ms)	I <sup>2</sup> t	15					A <sup>2</sup> sec
Maximum reverse recovery time (Note 2)	t <sub>rr</sub>	150		250		500	ns
Operating junction and storage temperature range	TJ, TSTG	-55 to + 150					°C

### Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.  
 For Capacitive load derate by 20 %.

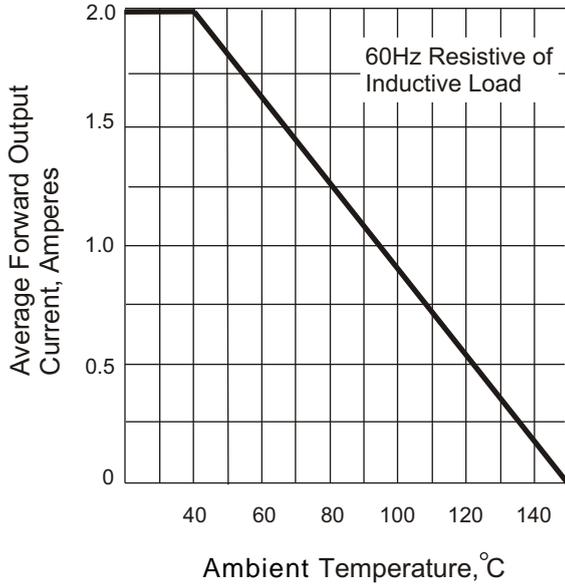
Parameter	Symbol	RBS 202	RBS 204	RBS 206	RBS 208	RBS 210	Unit
Maximum instantaneous forward voltage drop per leg at 2A	VF	1.3					V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C	IR	10 500					μA

Notes: (1) Thermal resistance from Junction to Ambient on P.C.board mounting.  
 (2): Reverse recovery time test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A

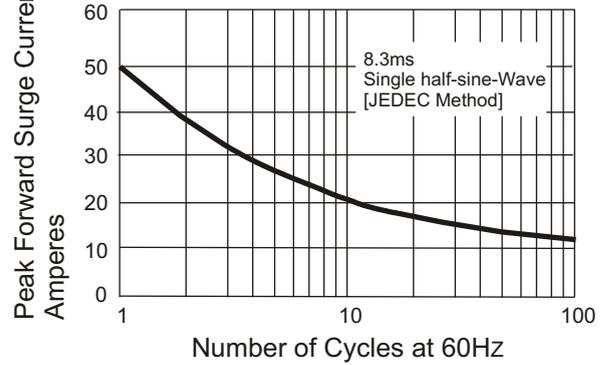
# Rating and Characteristic Curves ( $T_A=25^\circ\text{C}$ Unless otherwise noted )

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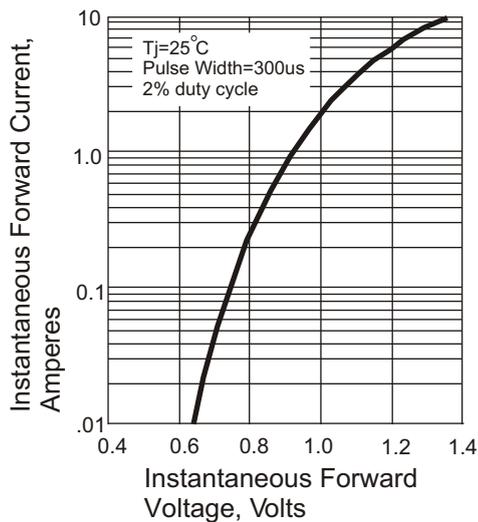
**Fig. 1 Derating Curve for Output Rectified Current**



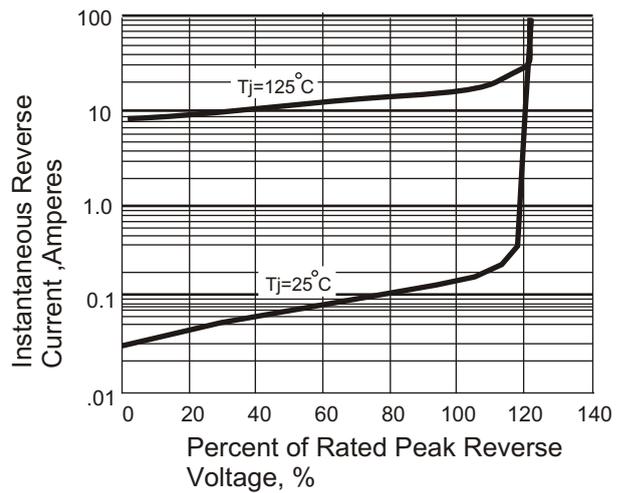
**Fig. 2 Maximum Non-repetitive Peak Forward Surge Current**



**Fig. 3 Typical Instantaneous Forward Characteristics**



**Fig. 4 Typical Revers Characteristics**



**Fig. 5 Typical Junction Capacitance**

