



ABS2005 thru ABS210

2.0 A Single-Phase Glass Passivated Bridge Rectifiers Rectifier Reverse Voltage 50 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

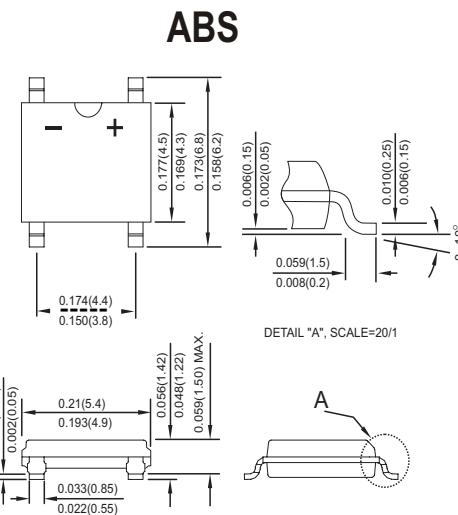
Mechanical Data

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	ABS 2005	ABS 201	ABS 202	ABS 204	ABS 206	ABS 208	ABS 210	unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input 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 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 ² t				15				A ² sec
Typical thermal resistance per element(1)	ReJA				25				°C / W
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	ABS 2005	ABS 201	ABS 202	ABS 204	ABS 206	ABS 208	ABS 210	Unit
Maximum instantaneous forward voltage drop per leg at 2A	VF				1.1				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)Measured at 2.0MHz and applied reverse voltage of 4.0 volts.

Rating and Characteristic Curves ($T_A=25^\circ\text{C}$ Unless otherwise noted)
ABS2005 thru ABS210

Fig. 1 Derating Curve for Output Rectified Current

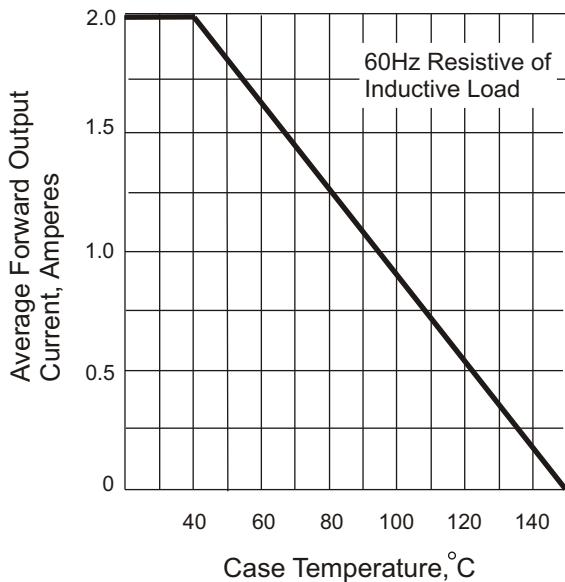


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

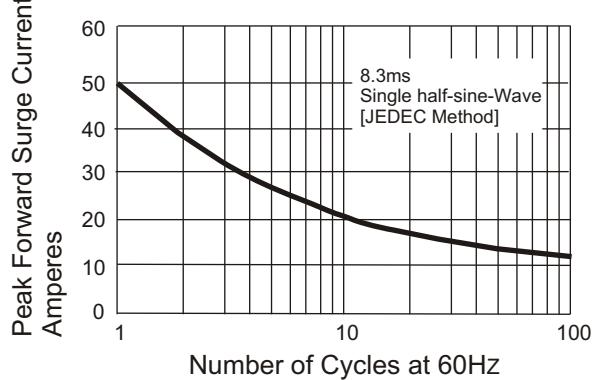


Fig. 4 Typical Revers Characteristics

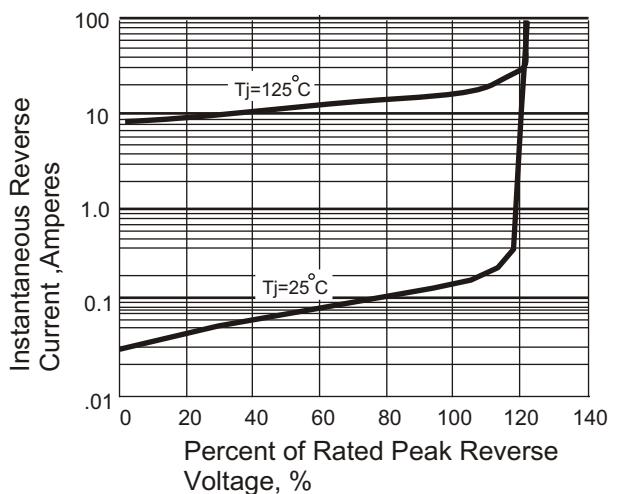


Fig. 3 Typical Instantaneous Forward Characteristics

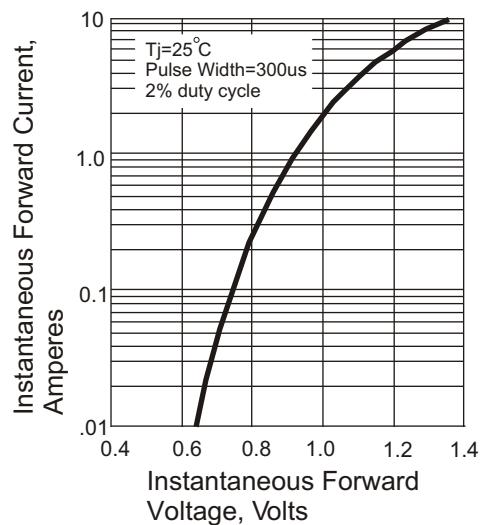


Fig. 5 Typical Junction Capacitance

