



ABS208 – ABS210

PFC Device Corporation

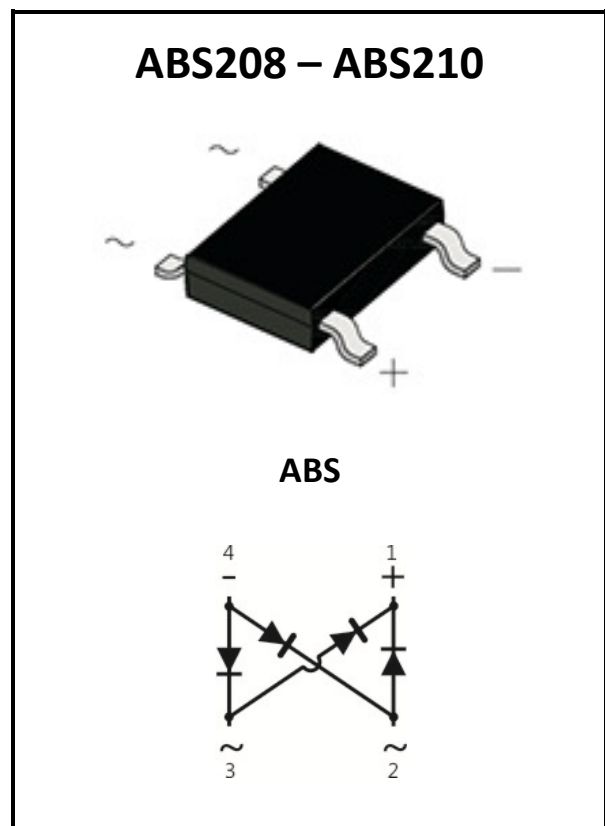
2A Glass Passivated Surface Mount Bridge Rectifiers

Major ratings and characteristics

| Characteristics | Values | Units |
|---|-------------|------------|
| Max. Avg. Forward Current (on aluminum) | 2 | A |
| $V_F @ 0.8A, T_a = 25^\circ C$ | 0.95 | V, Max. |
| T_J Operating Junction Temperature | -55 to +150 | $^\circ C$ |

Features

- Ideal for printed circuit board
- Glass passivated junction
- High surge current capability
- Small size, simple installation
- 150 $^\circ C$ Operating Junction Temperature
- Lead Free Finish, RoHS Compliant



Typical Applications

Device ideal used on AC-to-DC bridge full wave rectification for LED lighting, mobile phone charger, home appliances, and networking in Power Supply applications

1. Characteristics

Maximum Ratings and Electrical Characteristics

Rating at 25C ambient temperature unless otherwise specified.

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

For capacitive load current derate by 20%.

| Parameter | | Symbol | ABS208 | ABS210 | Units |
|---|----------------------|----------------|--------------|--------|-----------------|
| Maximum Repetitive Peak Reverse Voltage | | V_{RRM} | 800 | 1000 | Volts |
| Maximum RMS Voltage | | V_{RMS} | 560 | 700 | |
| Maximum DC blocking Voltage | | V_{RRM} | 800 | 1000 | |
| Maximum Average Forward Rectified Current | Aluminum Substrate | $I_{F(AV)}$ | 2.0 | | Amp |
| | Glass-epoxy P.C.B | | 1.6 | | |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | | I_{FSM} | 50 | | Amps |
| Maximum instantaneous Forward Voltage at 0.8A | | V_F | 0.95 | | Volts |
| Maximum DC Reverse Current at Rated DC blocking voltage | $T_A=25^{\circ}C$ | I_R | 5.0 | | uA |
| | $T_A=125^{\circ}C$ | | 150 | | |
| Rating for fusing (t < 8.3mS) | | I^2t | 10.37 | | A^2sec |
| Typical Junction Capacitance Pre Leg | | C_J | 30 | | pF |
| Typical Thermal Resistance | Junction to Lead | $R\theta_{JL}$ | 25 | | $^{\circ}C / W$ |
| | On glass-epoxy P.C.B | $R\theta_{JA}$ | 70 | | |
| Operating Junction Temperature Range | | T_J | - 55 to +150 | | $^{\circ}C$ |
| Storage Junction Temperature | | T_{STG} | - 55 to +150 | | |



2. Characteristics Curves

Ratings and Characteristics Curves

(TA = 25°C unless otherwise specified)

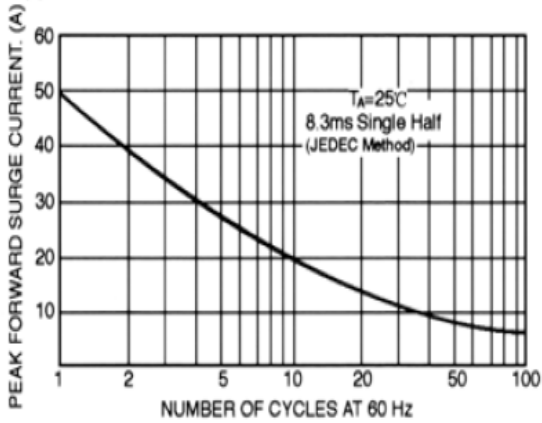


Figure 1: Max. Non-Repetitive Forward Surge Current

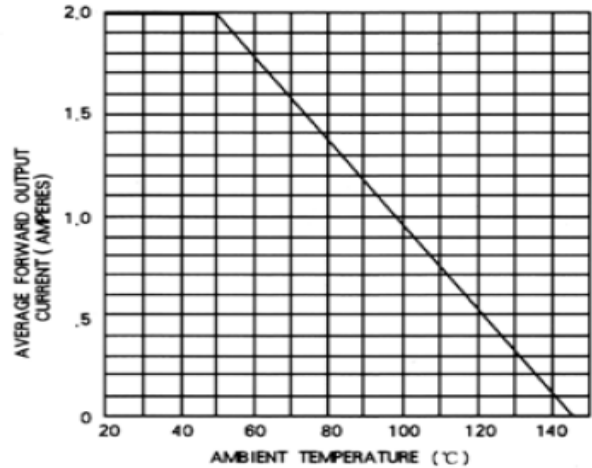


Figure 2: Current Derating, Ambient

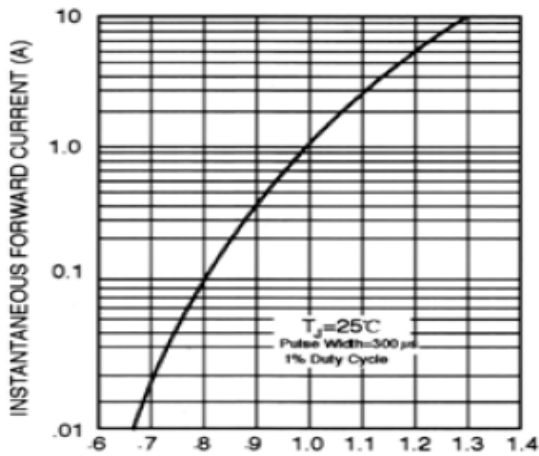


Figure 3: Typical Forward Voltage

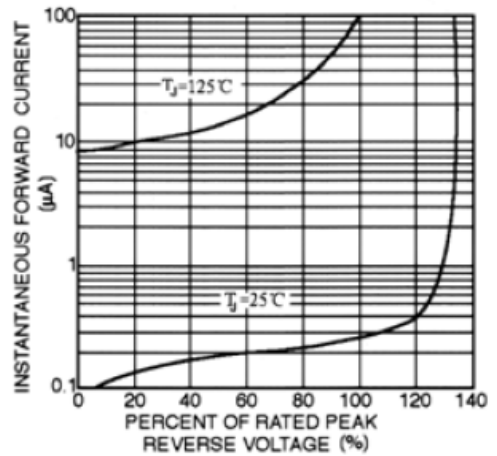
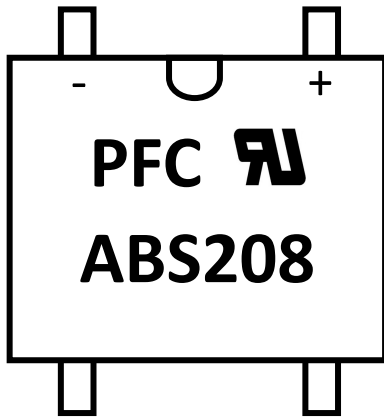


Figure 4: Typical Reverse Characteristics-Pre Element

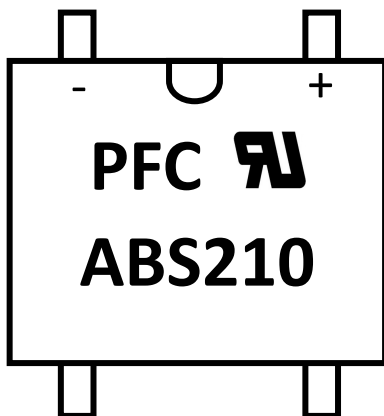


3. Marking information

Top Marking Rule



ABS208 = Product Type Marking Code



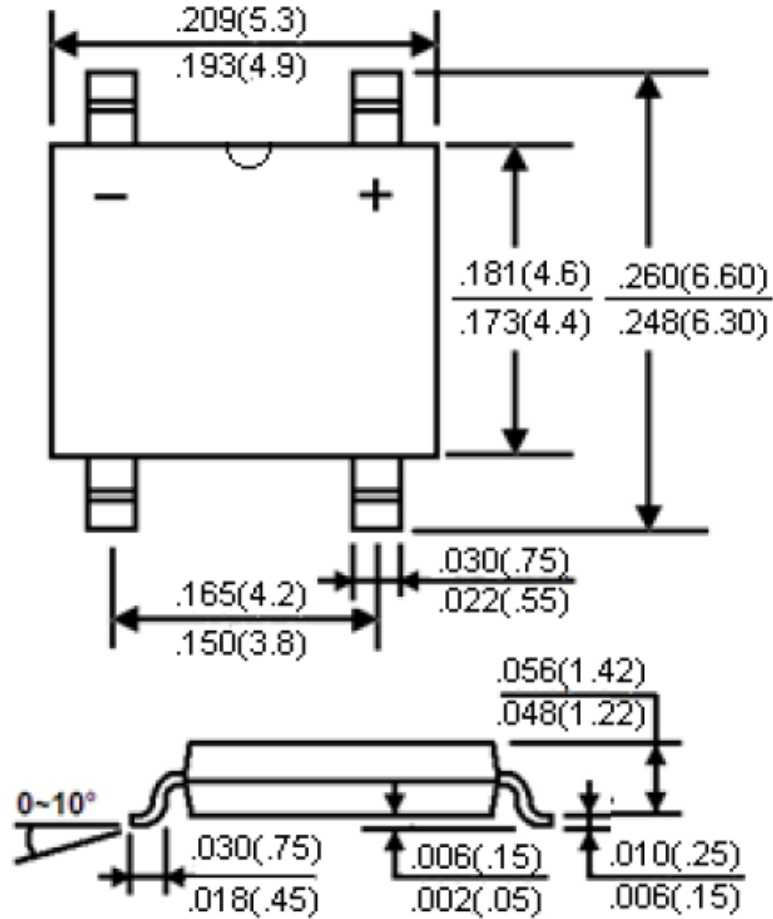
ABS210 = Product Type Marking Code



4. Package information

Package Outline Dimensions millimeters

ABS:



5. Ordering information

| Part Number | Package | Delivery mode |
|-------------|---------|--------------------|
| ABS208 | ABS | 5000 pieces / Reel |
| ABS210 | ABS | 5000 pieces / Reel |

Mechanical

- Molder Plastic: UL Flammability Classification Rating 94V-0
- Device Weight : 0.03 ounces (0.093 grams) – ABS

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