# **ABS2 THRU ABS10**



Single Phase 1.0 AMP. Glass Passivated Bridge Rectifiers

Thin Mini-Dip

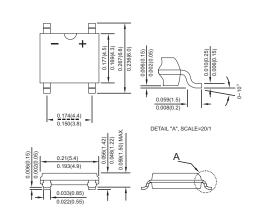


### **Features**

- ♦ Glass passivated junction
- ♦ Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- → High temperature soldering guaranteed: 260°C / 10 seconds / 0.375" ( 9.5mm ) lead length at 5 lbs., ( 2.3 kg ) tension
- High surge current capability
- ♦ Lead Free Finish/RoHS Compliant

## VOLTAGE RANGE 50 to 1000 Volts CURRENT

1.0 Ampere



Dimensions in inches and (millimeters)

### **Maximum Ratings and Electrical Characteristics**

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

| Type Number  | Symbol                               | ABS2             | ABS4 | ABS6 | ABS8 | ABS10 | Units      |
|--|--------------------------------------|------------------|------|------|------|-------|------------|
| Maximum Recurrent Peak Reverse Voltage   | $V_{RRM}$                            | 200              | 400  | 600  | 800  | 1000  | V          |
| Maximum RMS Voltage  | $V_{RMS}$                            | 140              | 280  | 420  | 560  | 700   | V          |
| Maximum DC Blocking Voltage  | $V_{DC}$                             | 200              | 400  | 600  | 800  | 1000  | V          |
| Maximum Average Forward Rectified Current<br>On glass-epoxy P.C.B. On aluminum substrate           | I <sub>(AV)</sub>                    | 1.0              |      |      |      |       | Α          |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I <sub>FSM</sub>                     | 30               |      |      |      |       | Α          |
| Maximum Instantaneous Forward Voltage @ 0.5A   | $V_{F}$                              | 0.95             |      |      |      |       | V          |
| Maximum DC Reverse Current @ T <sub>A</sub> =25℃ at Rated DC Blocking Voltage                      | I <sub>R</sub>                       | 10               |      |      |      |       | uA         |
| Typical Thermal resistance Junction to Lead On aluminum substrate On Glass-Epoxy substrate         | Rθ <sub>JL</sub><br>Rθ <sub>JA</sub> | 25<br>62.5<br>80 |      |      |      |       | <b>℃/W</b> |
| Operating Temperature Range  | TJ                                   | -55 to +150      |      |      |      |       | $^{\circ}$ |
| Storage Temperature Range  | $T_{STG}$                            | -55 to +150      |      |      |      |       | $^{\circ}$ |

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#### RATINGS AND CHARACTERISTIC CURVES

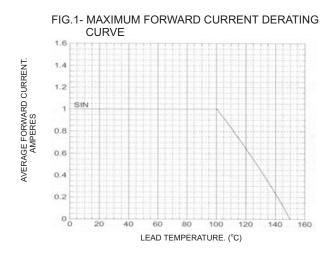


FIG.3- MAXIMUM FORWARD CURRENT DERATING CURVE

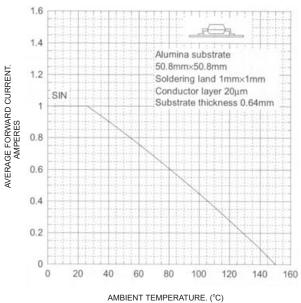


FIG.2- TYPICAL FORWARD CHARACTERISTICS

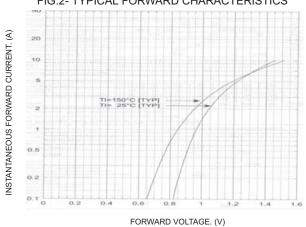


FIG.4- FORWARD POWER DISSIPATION

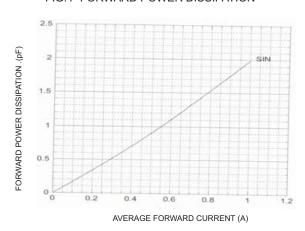
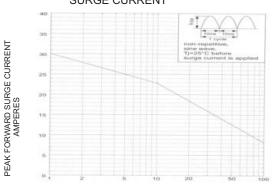


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



NUMBER OF CYCLES (CYCLE)

http://www.bytesonic.com.tw/ Version 1.1 2014/7/29