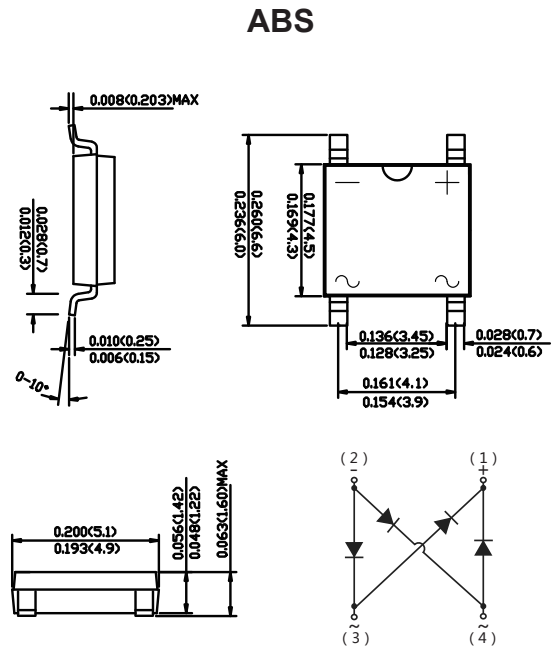


## Features

1. Ideal for printed circuit board
2. Reliable low cost construction utilizing molded plastic technique
3. High temperature soldering guaranteed:  
260°/10 seconds at 5 lbs., (2.3kg) tension
4. Small size, simple installation
5. High surge current capability

## Mechanical Data

**Case** : JEDEC ABS Molded plastic body  
**Terminals** : Solder plated, solderable per MIL-STD-750, Method 2026  
**Polarity** : Polarity symbol marking on body  
**Mounting Position** : Any



Dimensions in inches and (millimeters)

## Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

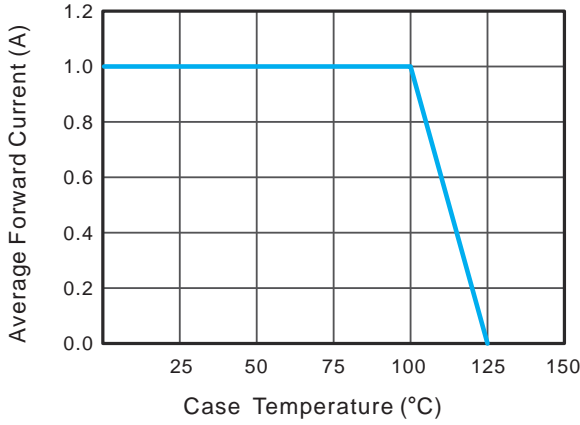
| Parameter   | SYMBOLS         | AB14S                   | AB16S | AB18S                    | AB110S | AB120S | UNITS |
|---|-----------------|-------------------------|-------|--------------------------|--------|--------|-------|
|   |                 | AB14S                   | AB16S | AB18S                    | AB110S | AB120S |       |
| Marking Code  |                 | AB14S                   | AB16S | AB18S                    | AB110S | AB120S |       |
| Maximum repetitive peak reverse voltage   | $V_{RRM}$       | 40                      | 60    | 80                       | 100    | 200    | V     |
| Maximum RMS voltage   | $V_{RMS}$       | 28                      | 42    | 56                       | 70     | 140    | V     |
| Maximum DC blocking voltage   | $V_{DC}$        | 40                      | 60    | 80                       | 100    | 200    | V     |
| Maximum average forward rectified current   | $I_{F(AV)}$     | 1.0                     |       |                          |        |        | A     |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | $I_{FSM}$       | 40                      |       | 30                       |        |        | A     |
| Maximum instantaneous forward voltage drop per leg at 1A  | $V_F$           | 0.55                    | 0.70  | 0.85                     |        |        | V     |
| Maximum DC reverse current at rated DC blocking voltage   | $I_R$           | $T_A=25^\circ C$<br>0.3 |       | $T_A=100^\circ C$<br>0.2 |        | 0.1    | mA    |
|   |                 | 10                      |       | 5                        |        | 2      | mA    |
| Typical thermal resistance  | $R_{\theta JA}$ | 95                      |       |                          |        |        | °C/W  |
| Typical junction capacitance  | $C_j$           | 110                     | 80    |                          |        |        | pF    |
| Operating temperature range   | $T_J$           | -55 to +125             |       |                          |        |        | °C    |
| storage temperature range   | $T_{STG}$       | -55 to +150             |       |                          |        |        | °C    |

NOTE: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

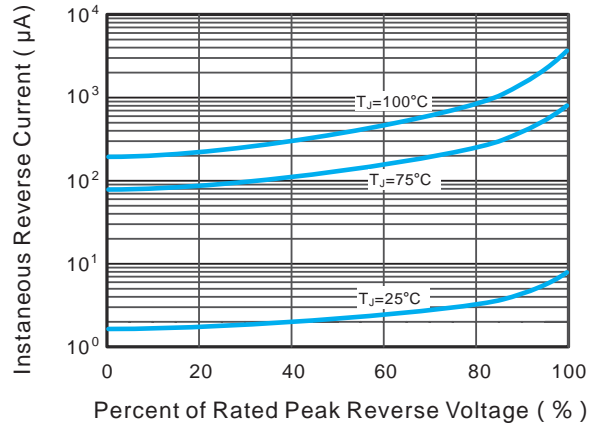
2. Mounted on glass epoxy P C board with 4 X (5X5mm) copper pad.

**Ratings And Characteristic Curves**

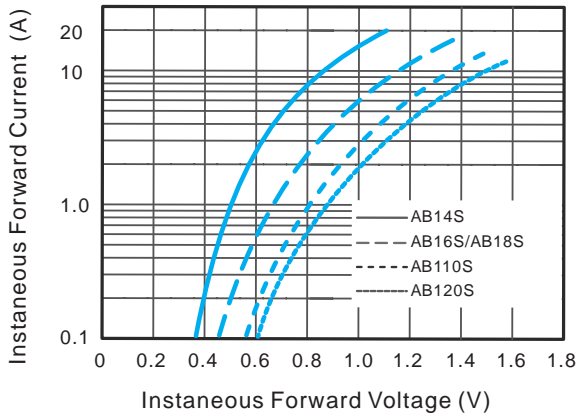
**Fig.1 Forward Current Derating Curve**



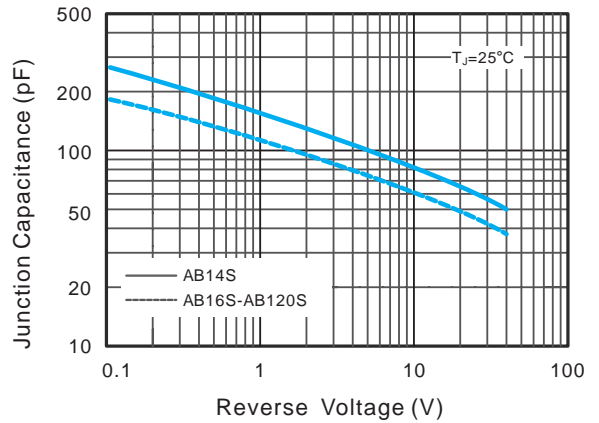
**Fig.2 Typical Reverse Characteristics**



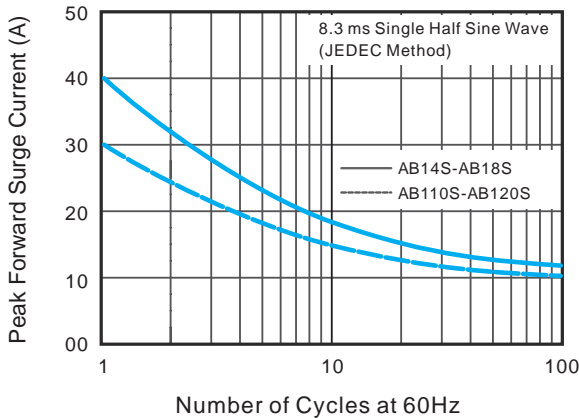
**Fig.3 Typical Forward Characteristic**



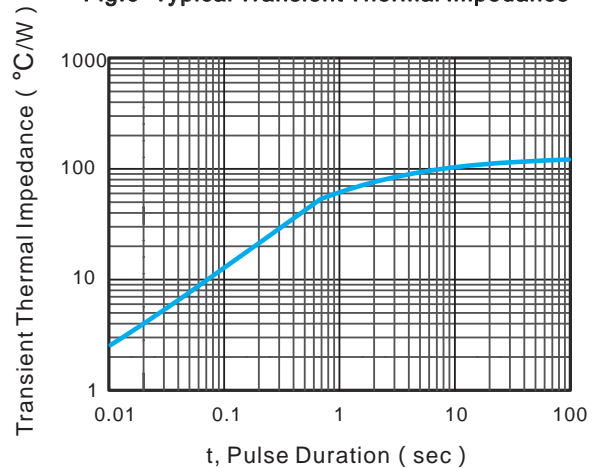
**Fig.4 Typical Junction Capacitance**



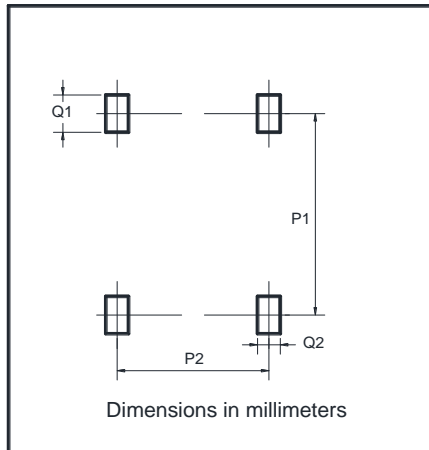
**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.6- Typical Transient Thermal Impedance**



**Suggested Pad Layout**



| Dim | Min  |
|-----|------|
| P1  | 5.72 |
| P2  | 4.00 |
| Q1  | 1.00 |
| Q2  | 0.90 |