# ABS22 THRU ABS210

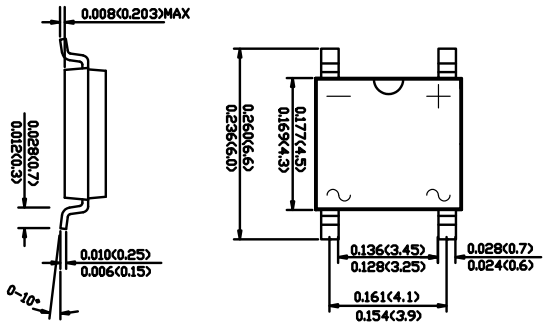
**Voltage Range - 200 to 1000 Volts  Current - 2.0 Ampere**

## SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

## Features

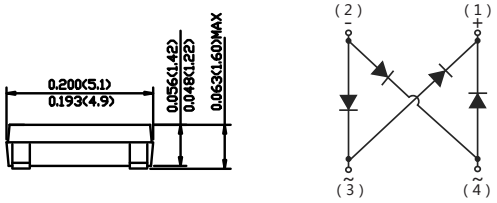
**ABS**

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- High temperature soldering guaranteed: 260°/10 seconds at 5 lbs., (2.3kg) tension
- Small size, simple installation
- 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 unlss otherwise specified.

Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

| Parameter<br>Marking Code | SYMBOLS | MDD ABS22 | MDD ABS24 | MDD ABS26 | MDD ABS28 | MDD ABS210 | UNITS |
|---|---|---|---|---|---|---|---|
| Maximum repetitive 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 | $I_{F(AV)}$ | 2.0 | | | | | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) | $I_{FSM}$ | 60 | | | | | A |
| Maximum instantaneous forward voltage drop per leg at 2.0A | $V_F$ | 1.0 | | | | | V |
| Rating for Fusing(t<8.3ms) | $I^2t$ | 10.375 | | | | | $A^2s$ |
| Maximum DC reverse current $T_A$=25°C<br>at rated DC blocking voltage $T_A$=125°C | $I_R$ | 5.0<br>100 | | | | | uA<br>uA |
| Typical thermal resistance(NOTE1) | $R\theta_{JA}$<br>$R\theta_{JC}$ | 60<br>16 | | | | | °C/W |
| Typical thermal resistance(NOTE2) | $C_J$ | 25 | | | | | pF |
| Operating temperature range | $T_J$ | -55 to +150 | | | | | °C |
| storage temperature range | $T_{STG}$ | -55 to +150 | | | | | °C |

Note: 1 .Mounted on glass epoxy PC board with 4×1.5"×1.5"（3.81×3.81 cm）copper pad.
2. Measured at 1MHz and applied reverse voltage of 4 V D.C.

## Ratings And Characteristic Curves

Fig.1 Average Rectified Output Current Derating Curve

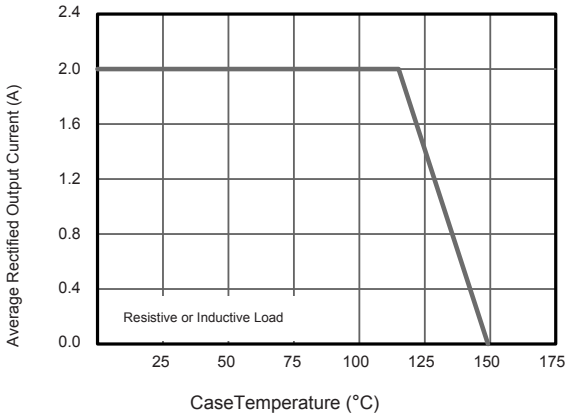



Fig.2 Typical Reverse Characteristics

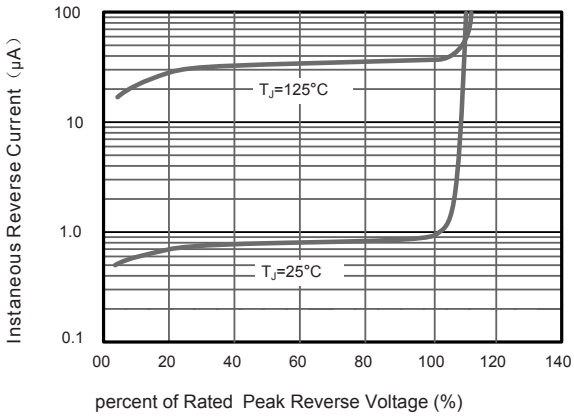



Fig.3 Typical Instaneous Forward Characteristics $T_J$=25°

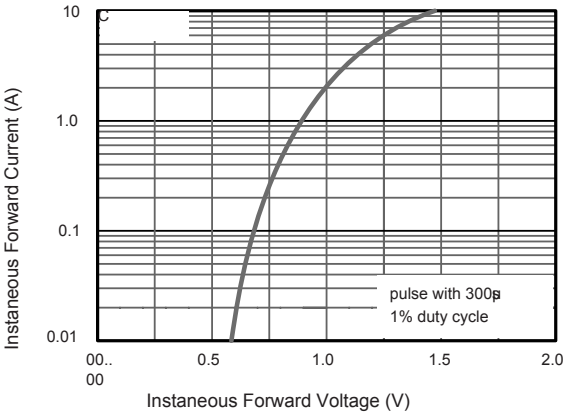



Fig.4 Typical Junction Capacitance

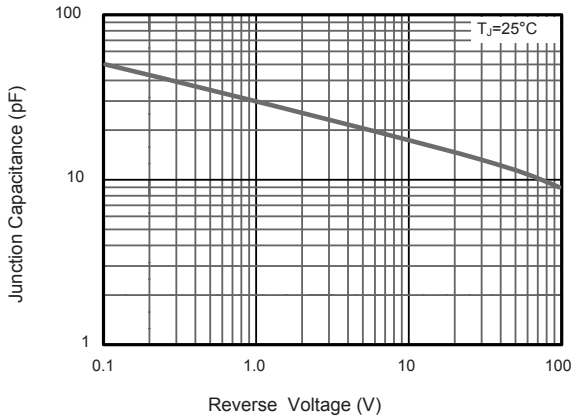
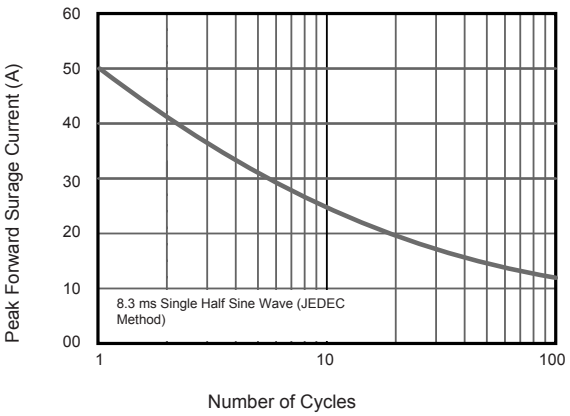
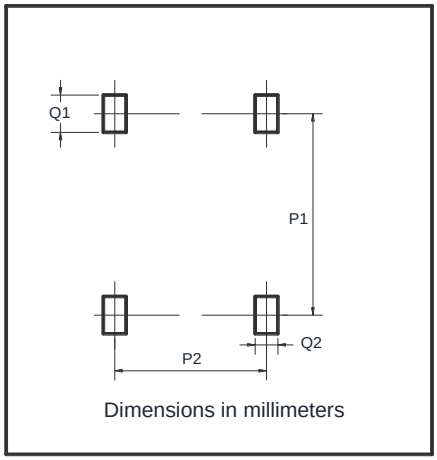



Fig.5 Maximum Non-Repetitive Peak Forward Surage Current




The curve above is for reference only.

## Suggested Pad Layout



Dimensions in millimeters

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