# RABS2 THRU RABS10

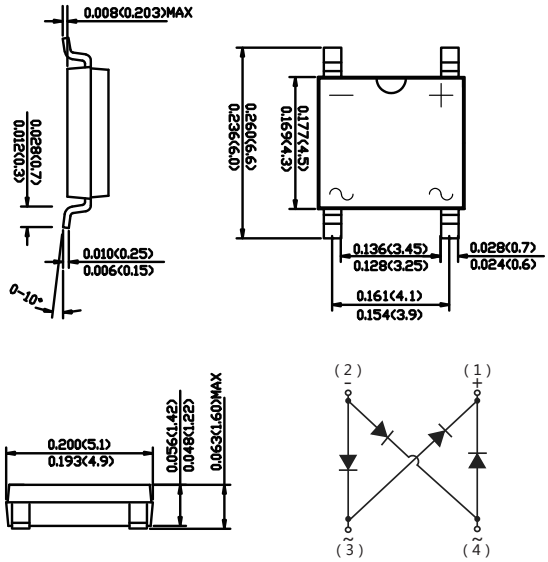
**Voltage Range - 200 to 1000 V olts  Current - 0.8/1.0 Ampere**

## GLASS PASSIVATED FAST RECOVERY BRIDGE RECTIFIERS

## Features

**ABS**  RoHS COMPLIANT

- 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
- Glass passivated chip junction
- Leads solderable per MIL-STD-202, Method 208




## 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
**Weight** : 0.003 ounce, 0.098 grams

Dimensions in inches and (millimeters)

## Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unle ss otherwise specified.

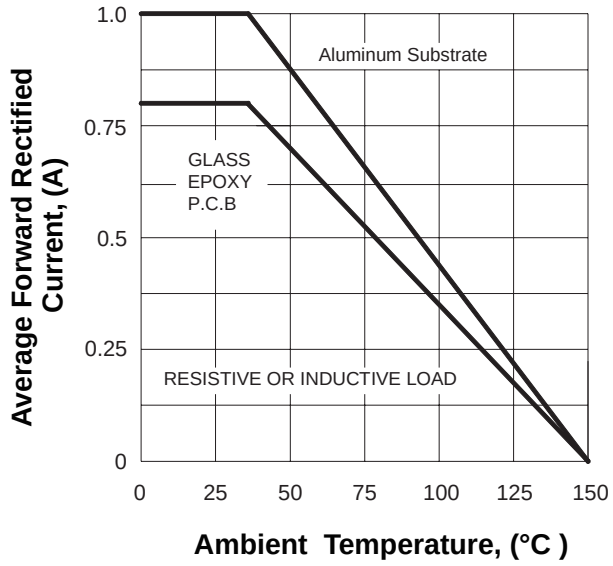
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

| Parameter<br>Marking Code | SYMBOLS | MDD RABS2 | MDD RABS4 | MDD RABS6 | MDD RABS8 | MDD RABS10 | 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<br>On glass-epoxy P.C.B.(Note1)<br>On aluminum substrate(Note2) | $I_{F(AV)}$ | 0.8<br>1.0 | | | | | A |
| Peak forward surge current,<br>8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | $I_{FSM}$ | 30 | | | | | A |
| Maximum instantaneous forward voltage drop per leg at 0.4A | $V_F$ | 1.3 | | | | | V |
| Maximum DC reverse current $T_A$=25°C<br>at rated DC blocking voltage $T_A$=100°C | $I_R$ | 5<br>500 | | | | | uA<br>uA |
| Typical thermal resistance(NOTE 3) | $R\theta_{JL}$<br>$R\theta_{JA}$ | 25<br>75 | | | | | °C/W |
| Maximum reverse recovery time (NOTE 4) | trr | 500 | | | | | ns |
| Operating temperature range | $T_J$ | -55 to +150 | | | | | °C |
| storage temperature range | $T_{STG}$ | -55 to +150 | | | | | °C |

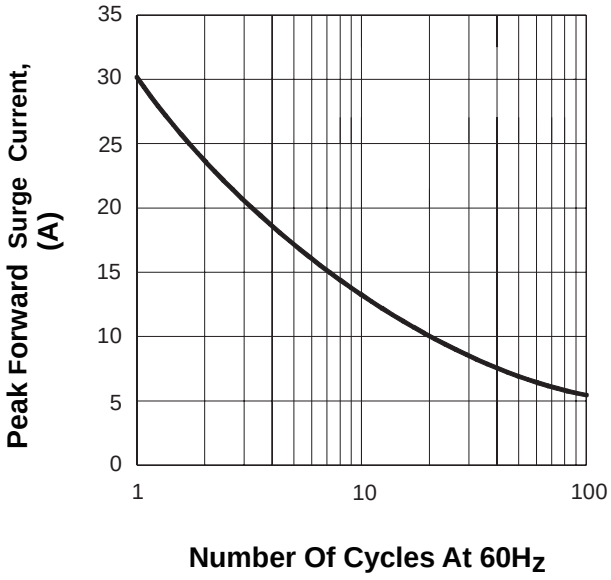
NOTES:1.On glass epoxy P.C.B. mounted on 0.05x0.05"(1.3x1.3mm) pads.
2.On aluminum substrate P.C.B. with an area of 0.8"x0.8"(20x20mm) mounted on 0.05X0.05"(1.3X1.3mm) solder pad.
3.Thermal resistance form junction to ambient and junction to lead mounted on P.C.B. with 0.2X0.2"(5X5mm) copper pads.
4.Reverse recovery condition $I_F$=0.5A,$I_R$=1.0A,Irr=0.25A.

## Ratings And Characteristic Curves

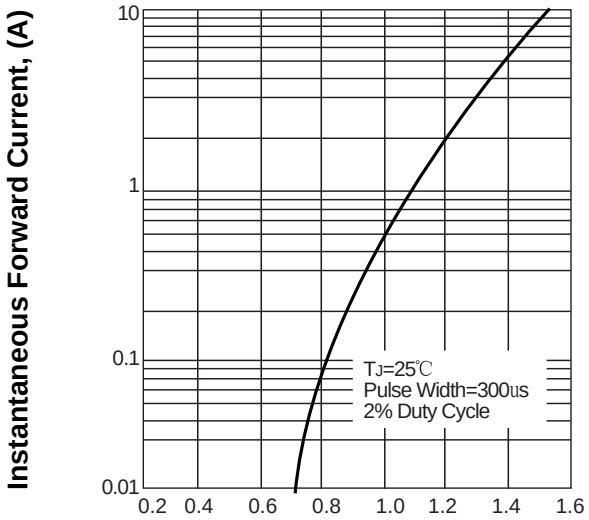
### FIG.1 FORWARD DERATING CURVE



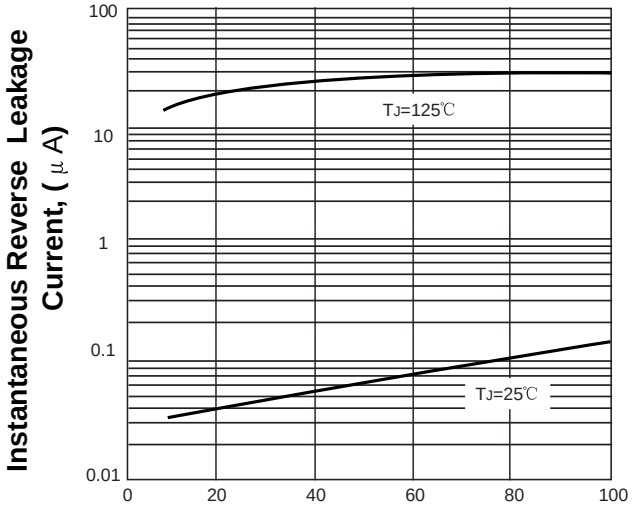

### FIG.2 PEAK FORWARD SURGE CURRENT




### FIG.3 TYPICAL FORWARD CHARACTERISTICS

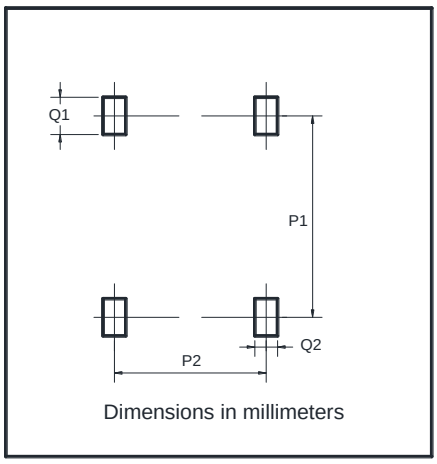



### FIG.4 TYPICAL REVERSE CHARACTERISTICS




The curve above is for reference only.

## Suggested Pad Layout




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