



Rectifier Reverse Voltage 50V to 1000V

### MSB

### Features

- Glass passivated junction
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Surge overload ratings to 100 amperes peak
- Ideal for printed circuit board application
- High temperature soldering guaranteed 265°C/10 seconds at 5 lbs(2.3kg)tension

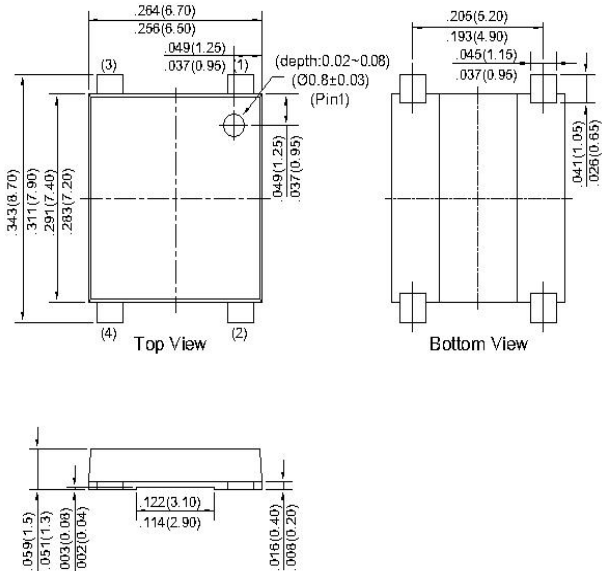
### Mechanical Data

Case:Molded plastic

Terminals:Platde leads solderable per MIL-STD-750, Method 2026

Polarity:Polarity symbols molded or Marked on body

Mounting Position:Any



### SPACING

### Maximum Ratings & Thermal Characteristics

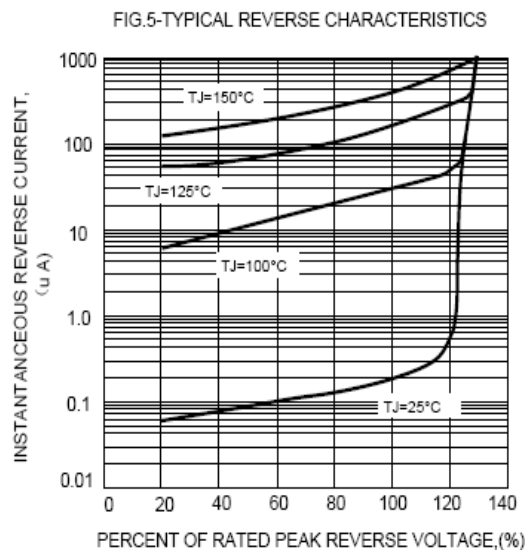
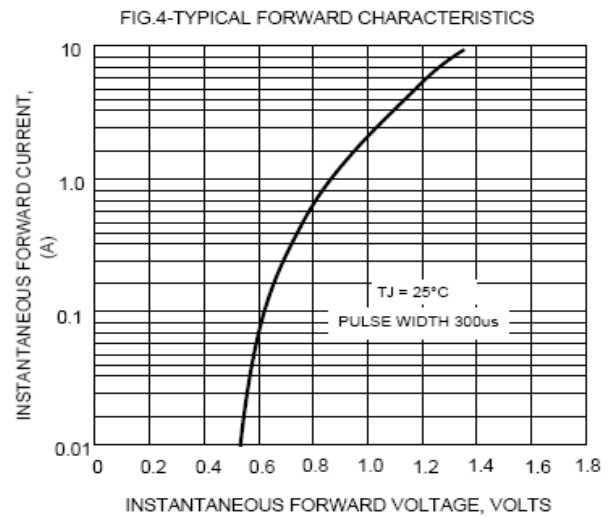
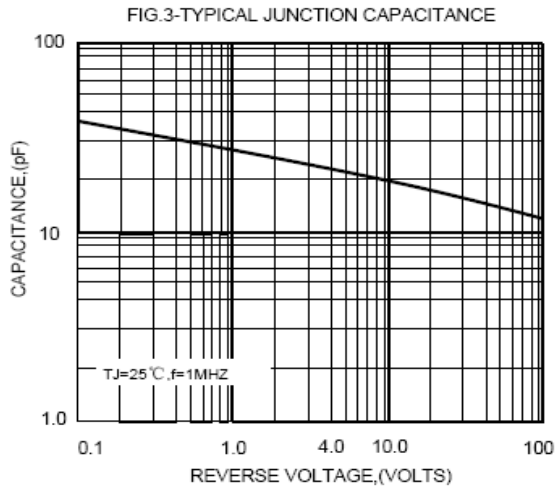
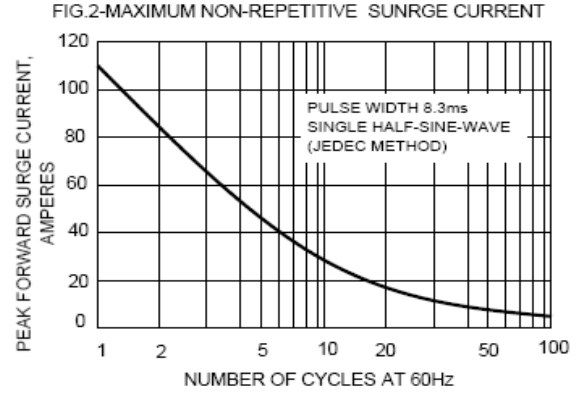
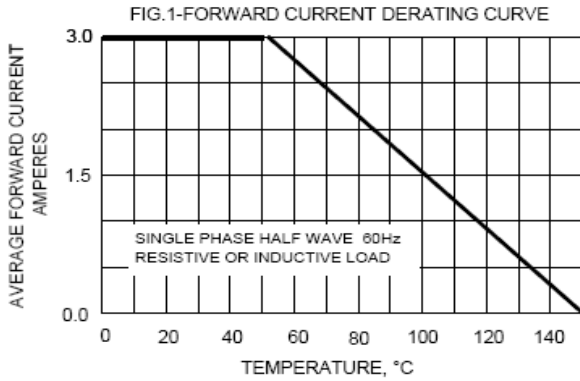
Rating at 25°C ambient temperature unless otherwise specified, Resistive or inductive load, 60HZ.

For Capacitive load derate current by 20%

| Parameter   | Symbol           | RMSB310   | unit               |
|---|------------------|-----------|--------------------|
| Maximum repetitive peak reverse voltage   | VRRM             | 1000      | V                  |
| Maximum RMS bridge input voltage  | VRMS             | 700       | V                  |
| Maximum DC blocking voltage   | VDC              | 1000      | V                  |
| Maximum average forward rectified output current at TA=40°C                           | IF(AV)           | 3.0       | A                  |
| Maximum instantaneous forward voltage drop per leg at 3.0A                            | VF               | 1.3       | V                  |
| Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method) | IFSM             | 110       | A                  |
| Maximum reverse recovery time(note 1)   | TRR              | 500       | ns                 |
| Maximum DC reverse current at ratde TA=25°C   | IR               | 5         | UA                 |
| DC blocking voltage per element TA=125°C  |                  | 500       |                    |
| Rating for fusing(t<8.3ms)  | I <sup>2</sup> t | 50        | A <sup>2</sup> sec |
| Typical thermal resistance to ambient   | ReJA             | 55        | °C/w               |
| Typical thermal resistance to case  | ReJC             | 10.0      |                    |
| Typical thermal resistance to lead  | ReJL             | 15.0      |                    |
| Operating junction and stroage temperature range                                      | TJ, TSTG         | -55to+150 | °C                 |

Notes:1 Measured with IF=0.5A,IR=1A,IRR=0.25A

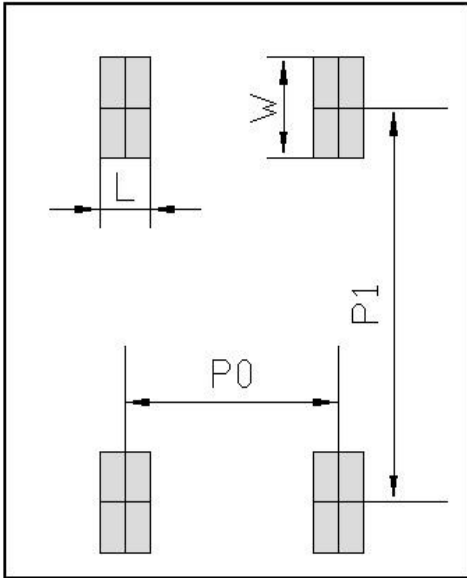
### Rating and Characteristic Curves (TA=25°C Unless otherwise noted)



### Ordering Information(Example)

| PREFFREN P/N | UNIT WEIGHT(g)   | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|--------------|------------------|----------------------|-------------------------|----------------------------|---------------|
| TMBFR310     | Approximate 0.20 | 3000                 | 6000                    | 36000                      | REEL          |

### Suggested pad layout



Dimensions in millimeters

| Unit:mm |      |
|---------|------|
| DIM     | MIN  |
| P0      | 5.12 |
| P1      | 8.73 |
| L       | 1.2  |
| W       | 2.22 |