

# BR1005      THRU      BR1010

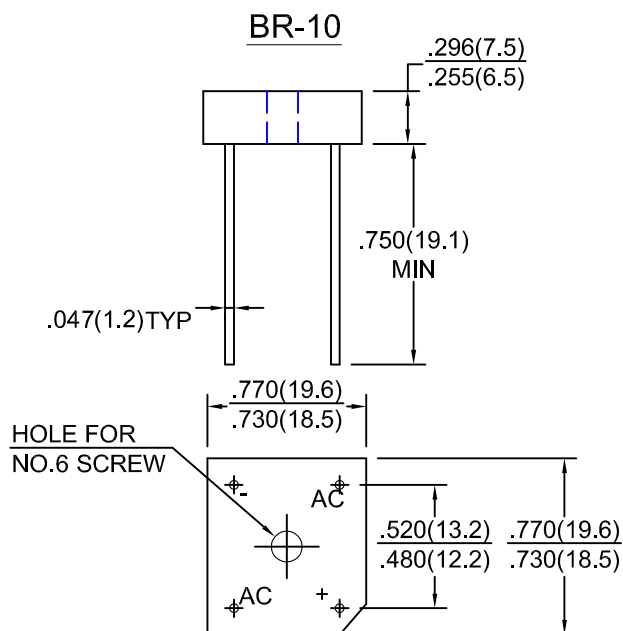
## SINGLE PHASE SILICON BRIDGE RECTIFIERS

### FEATURES:

- Low forward voltage drop
- Low leakage current

### MECHANICAL DATA

Case : Molded plastic body  
 Polarity : marked on body  
 Mounting position : Any  
 Mounting : Hole thru for # 6 screw



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temp. unless otherwise specified.  
 Single phase, half sine wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20 %.

| Characteristic  | Symbol             | BR 1005     | BR 101 | BR 102 | BR 104 | BR 106 | BR 108 | BR 1010 | Units |
|---|--------------------|-------------|--------|--------|--------|--------|--------|---------|-------|
| Maximum recurrent peak reverse voltage  | V <sub>RRM</sub>   | 50          | 100    | 200    | 400    | 600    | 800    | 1000    | Volts |
| Maximum RMS voltage   | V <sub>RMS</sub>   | 35          | 70     | 140    | 280    | 420    | 560    | 700     | Volts |
| Maximum DC blocking voltage   | V <sub>DC</sub>    | 50          | 100    | 200    | 400    | 600    | 800    | 1000    | Volts |
| Maximum average forward rectified current<br>.375"(9.5mm) lead length at T <sub>c</sub> =50°C       | I <sub>O</sub>     | 10          |        |        |        |        |        |         | Amps  |
| Peak forward surge current ,8.3ms single half sine-wave<br>superimposed on rated load(JEDEC Method) | I <sub>FSM</sub>   | 150         |        |        |        |        |        |         | Amps  |
| Maximum instantaneous forward voltage drop per bridge<br>element at 5.0 A DC                        | V <sub>F</sub>     | 1.1         |        |        |        |        |        |         | Volts |
| Maximum DC reverse current<br>at rated DC blocking voltage  | I <sub>R</sub>     | 10<br>1000  |        |        |        |        |        |         | μ A   |
| Typical junction capacitance  | C <sub>j</sub>     | 55          |        |        |        |        |        |         | pF    |
| Typical thermal resistance  | R <sub>th-JA</sub> | 9.4         |        |        |        |        |        |         | °C/W  |
| Operating temperature range   | T <sub>j</sub>     | -65 to +150 |        |        |        |        |        |         | °C    |
| Storage temperature range   | T <sub>stg</sub>   | -65 to +150 |        |        |        |        |        |         | °C    |

# RATINGS AND CHARACTERISTIC CURVES BR1005 THRU BR1010

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

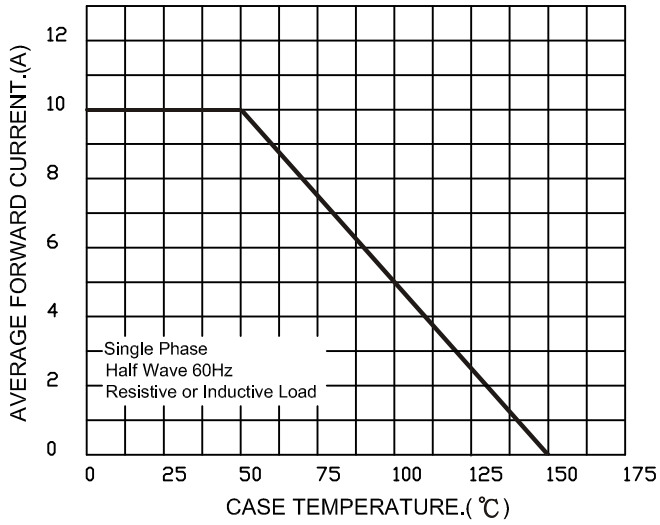


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

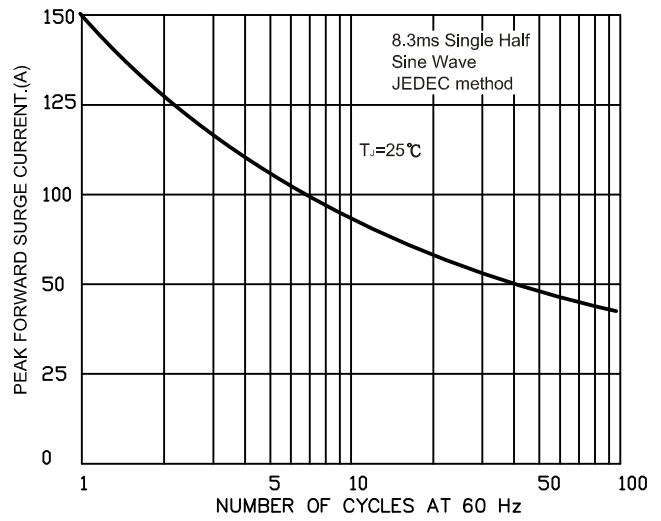


FIG.3-TYPICAL FORWARD CHARACTERISTICS

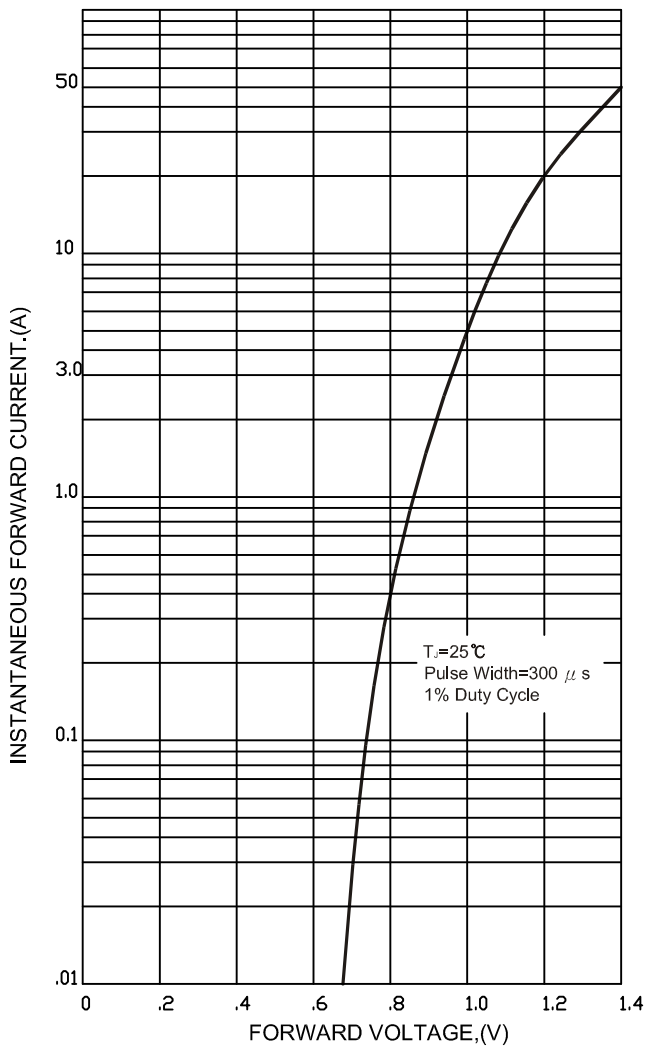


FIG.4-TYPICAL REVERSE CHARACTERISTICS

