



SCHOTTKY DIODE MODULE TYPES 400A

Features

- High surge Capability
- Types Up to 100V V<sub>RRM</sub>
- Isolation Type Package
- Electrically Isolation base plate

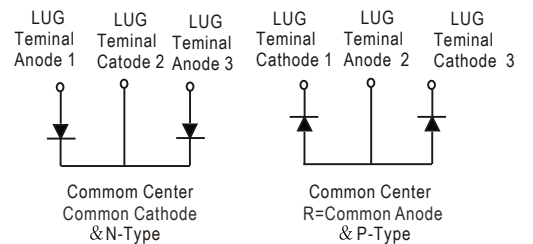
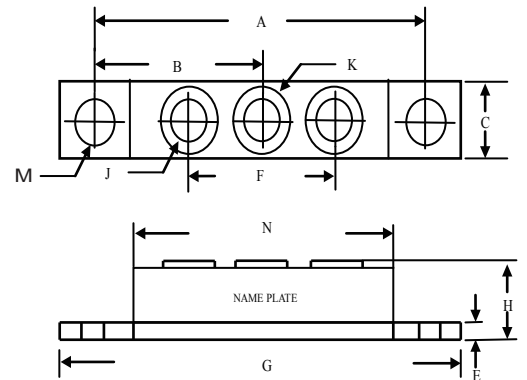
400 Amp Rectifier  
20~100 Volts

Maximum Ratings

Operating Temperature: -55°C to+150 °C  
Storage Temperature: -55°C to+150 °C

| Part Number   | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|---------------|----------------------------------------|---------------------|-----------------------------|
| MBRT40020(R)  | 20V                                    | 14V                 | 20V                         |
| MBRT40030(R)  | 30V                                    | 21V                 | 30V                         |
| MBRT40035(R)  | 35V                                    | 25V                 | 35V                         |
| MBRT40040(R)  | 40V                                    | 28V                 | 40V                         |
| MBRT40045(R)  | 45V                                    | 32V                 | 45V                         |
| MBRT40060(R)  | 60V                                    | 42V                 | 60V                         |
| MBRT40080(R)  | 80V                                    | 56V                 | 80V                         |
| MBRT400100(R) | 100V                                   | 70V                 | 100V                        |

THREE TOWER



Electrical Characteristics @ 25°C Unless Otherwise Specified

|                                                                                       |                    |                         |                                                                              |
|---------------------------------------------------------------------------------------|--------------------|-------------------------|------------------------------------------------------------------------------|
| Average Forward Current (Per pkg)                                                     | I <sub>F(AV)</sub> | 400A                    | T <sub>c</sub> =125 °C                                                       |
| Peak Forward Surge Current (Per leg)                                                  | I <sub>FSM</sub>   | 3000A                   | 8.3ms, half sine                                                             |
| Maximum Instantaneous Forward Voltage (Per leg) 20V~45V 50V~60V 80V~100V              | V <sub>F</sub>     | 0.70V<br>0.75V<br>0.84V | I <sub>FM</sub> =200A; T <sub>J</sub> =25 °C                                 |
| Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg) NOTE (1) | I <sub>R</sub>     | 1 mA<br>10 mA<br>50 mA  | T <sub>J</sub> = 25 °C<br>T <sub>J</sub> = 100 °C<br>T <sub>J</sub> = 150 °C |
| Maximum Thermal Resistance Junction To Case (Per leg)                                 | R <sub>θjc</sub>   | 0.35 °C/W               |                                                                              |

NOTE :

(1) Pulse Test: Pulse Width 300 μ sec, Duty < 2%

| DIM | Inches          |       | Millimeters |       |
|-----|-----------------|-------|-------------|-------|
|     | Min             | Max   | Min         | Max   |
| A   | 3.150           | NOM   | 80.01       | NOM   |
| B   | 1.565           | 1.585 | 39.75       | 40.26 |
| C   | .700            | .800  | 17.78       | 20.32 |
| E   | .119            | .132  | 3.02        | 3.35  |
| F   | 1.327           | REF   | 33.72       | REF   |
| G   | 3.55            | 3.65  | 90.17       | 92.71 |
| H   | ----            | .73   | ----        | 18.30 |
| J   | 1/4-20 UNC FULL |       |             |       |
| K   | .472            | .511  | 12          | 13    |
| M   | .275            | .295  | 6.99        | 7.49  |
| N   | 2.38            | 2.46  | 60.5        | 62.5  |



Figure.1-Typical Forward Characteristics

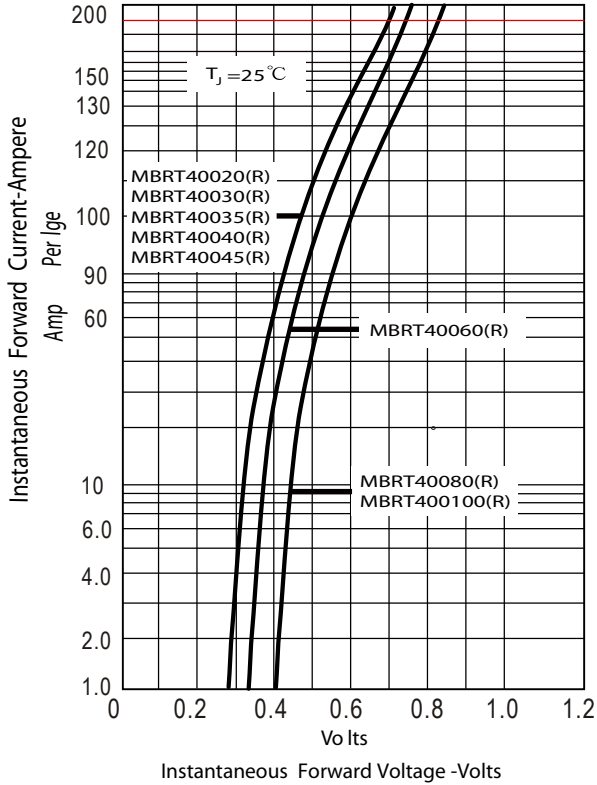


Figure.2-Forward Derating Curve

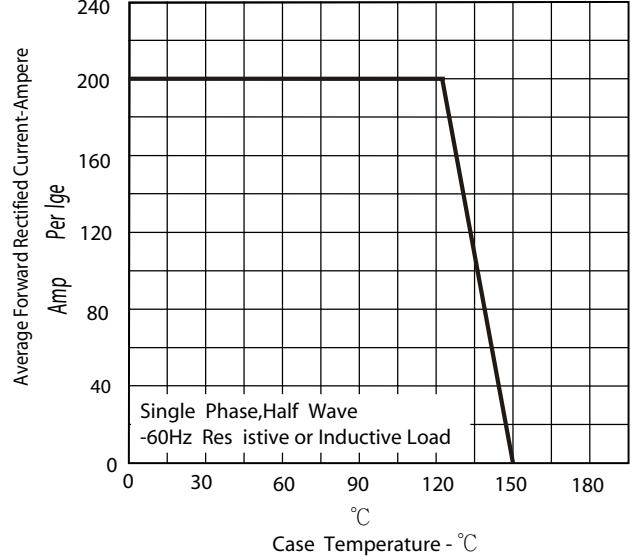


Figure.3-Peak Forward Surge Current

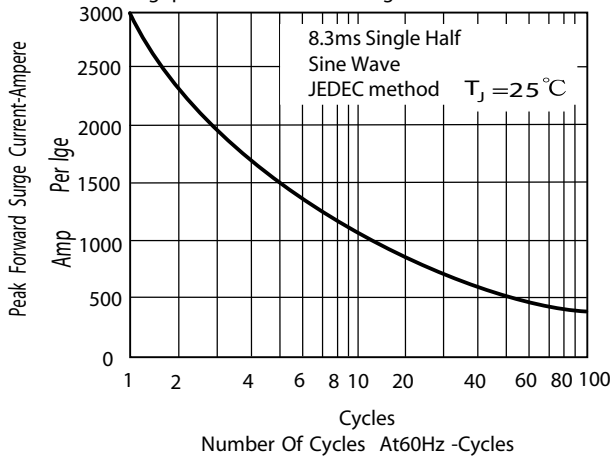


Figure.4-Typical Reverse Characteristics

