



**SCHOTTKY DIODE MODULE TYPES 400A**

**Features**

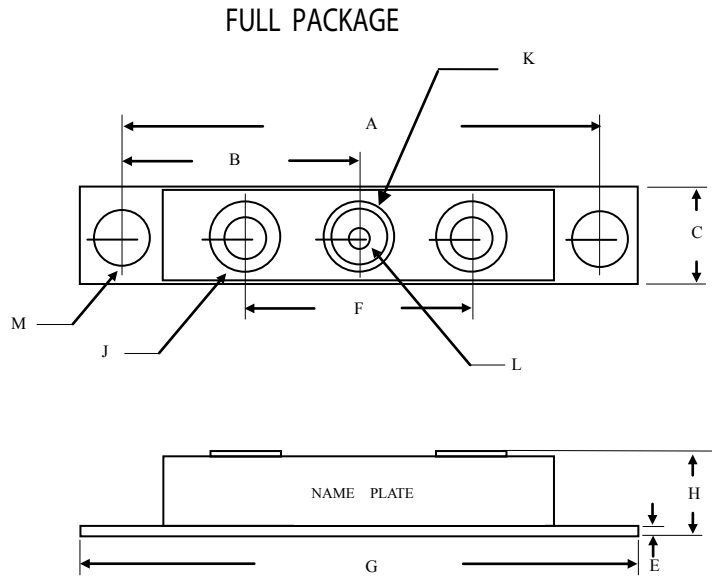
High Surge Capability  
Types Up to 200V  $V_{RRM}$

**400 Amp Rectifier  
150-200 Volts**

**Maximum Ratings**

Operating Temperature:  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$   
Storage Temperature:  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$

| Part Number   | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|---------------|--|---------------------|-----------------------------|
| MBRF400150(R) | 150V                                   | 106V                | 150V                        |
| MBRF400200(R) | 200V                                   | 141V                | 200V                        |
|               |  |                     |                             |
|               |  |                     |                             |



**Electrical Characteristics @ 25 °C Unless Otherwise Specified**

|  |                 |                     |  |
|--|-----------------|---------------------|--|
| Average Forward Current (Per pkg)  | $I_{F(AV)}$     | 400A                | $TC=125^{\circ}\text{C}$   |
| Peak Forward Surge Current (Per leg)   | $I_{FSM}$       | 3000A               | 8.3ms, half sine   |
| Maximum Instantaneous Forward Voltage (Per leg)<br>150V<br>200V              | $V_F$           | 0.88V<br>0.92V      | $I_{FM}=200\text{ A}; T_J=25^{\circ}\text{C}$                                      |
| Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg) | $I_R$           | 1mA<br>10mA<br>50mA | $T_J=25^{\circ}\text{C}$<br>$T_J=100^{\circ}\text{C}$<br>$T_J=150^{\circ}\text{C}$ |
| Maximum Thermal Resistance Junction To Case (Per leg)                        | $R_{\theta jc}$ | 0.35°C/W            |  |

| DIM | Inches          |       | Millimeters |       |
|-----|-----------------|-------|-------------|-------|
|     | Min             | Max   | Min         | Max   |
| A   | 3.144           | NOM   | 79.85       | NOM   |
| B   | 1.565           | 1.585 | 39.75       | 40.26 |
| C   | 0.700           | 0.800 | 17.78       | 20.32 |
| E   | 0.119           | 0.14  | 3.02        | 3.50  |
| F   | 1.358           | REF.  | 34.50       | REF.  |
| G   | 3.55            | 3.65  | 90.17       | 92.71 |
| H   | 0.604           | 0.65  | 15.35       | 16.51 |
| J   | 1/4-20 UNC FULL |       |             |       |
| K   | 0.380           | 0.410 | 9.65        | 10.41 |
| L   | 0.185           | 0.195 | 4.70        | 4.95  |
| M   | 0.275           | 0.295 | 6.99        | 7.49  |

NOTE :  
(1) Pulse Test: Pulse Width 300 usec, Duty Cycle < 2%



Figure .1- Typical Forward Characteristics

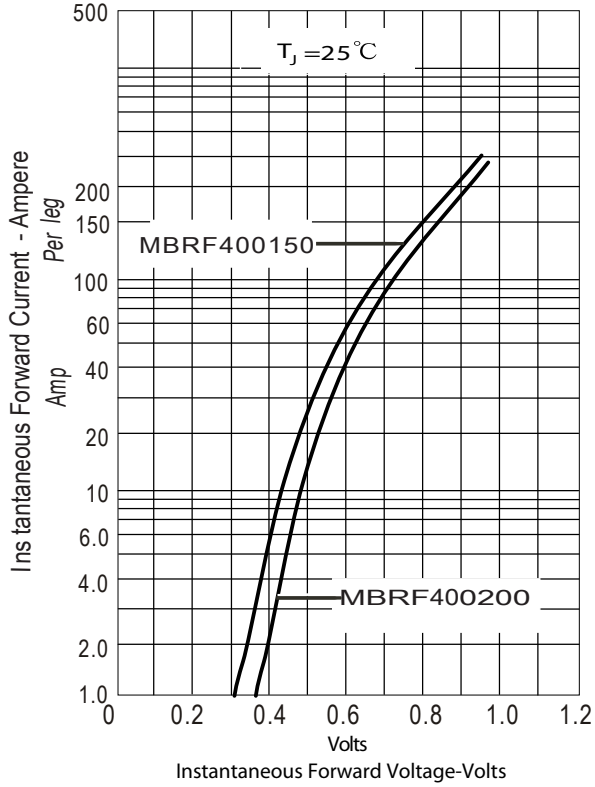


Figure .2- Forward Derating Curve

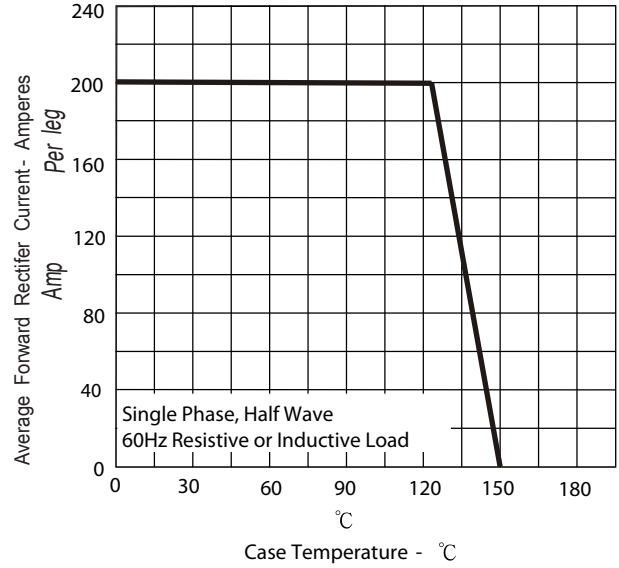


Figure .4- Typical Reverse Characteristics

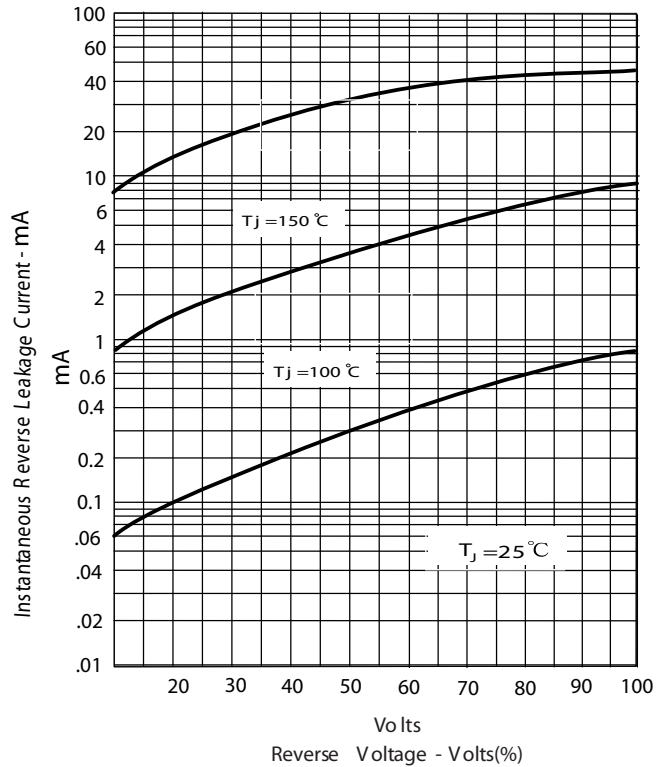


Figure.3-Peak Forward Surge Current

