

**SCHOTTKY DIODE MODULE TYPE 160A**

**Features**

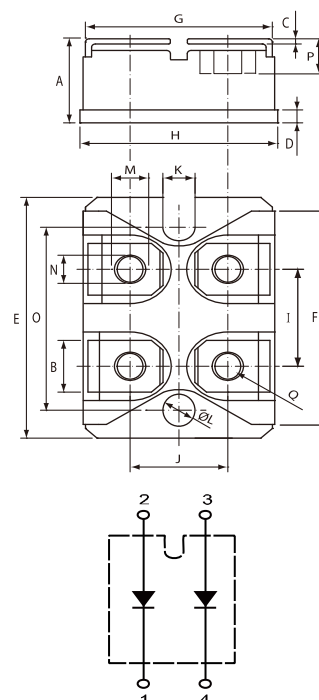
- High Surge Capability
- Type 120V  $V_{RRM}$
- Isolation Type Package
- Electrically Isolation base plate
- RoHS compliant



**Maximum Ratings**

Operating Temperature : -40 °C to +150 °C  
 Storage Temperature : -40 °C to +150 °C

| Part Number   | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|---------------|--|---------------------|-----------------------------|
| MBRI2X80-120A | 120V                                   | 84V                 | 120V                        |



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

|   |                 |                        |   |
|---|-----------------|------------------------|---|
| Average Forward Current<br>(Per pkg)  | $I_{F(AV)}$     | 160A                   | $T_c = 110\text{ °C}$   |
| Peak Forward Surge Current<br>(Per leg)   | $I_{FSM}$       | 900A                   | 8.3ms, half sine  |
| Maximum Instantaneous Forward Voltage<br>NOTE(1) (Per leg)                      | $V_F$           | 0.76V<br>0.88V         | $I_{FM} = 80A; T_J = 125\text{ °C}$<br>$I_{FM} = 80A; T_J = 25\text{ °C}$ |
| Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage<br>(Per leg) | $I_R$           | 3 mA<br>10 mA<br>30 mA | $T_J = 25\text{ °C}$<br>$T_J = 100\text{ °C}$<br>$T_J = 150\text{ °C}$    |
| Isolation Voltage   | $V_{iso}$       | 2500V                  | A.C. 1 minute   |
| Maximum Thermal Resistance Junction To Case<br>(Per leg)                        | $R_{\theta jc}$ | 0.60 °C/W              |   |
| Mounting torque   | N-m             | 1.1                    | M4 Screw  |

MBRI 2X80 xxxA

| DIM | DIMENSIONS |       |       |       |
|-----|------------|-------|-------|-------|
|     | INCHES     |       | MM    |       |
|     | MIN        | MXA   | MIN   | MXA   |
| A   | .500       | .535  | 12.70 | 13.60 |
| B   | .307       | .322  | 7.80  | 8.20  |
| C   | .029       | .033  | .75   | .84   |
| D   | .073       | .082  | 1.85  | 2.10  |
| E   | 1.487      | 1.502 | 37.80 | 38.20 |
| F   | 1.250      | 1.258 | 31.75 | 32.00 |
| G   | .931       | .956  | 23.65 | 24.30 |
| H   | .996       | 1.007 | 25.30 | 25.60 |
| I   | .586       | .594  | 14.90 | 15.10 |
| J   | .492       | .516  | 12.50 | 13.10 |
| K   | .161       | .169  | 4.10  | 4.30  |
| L   | .161       | .169  | 4.10  | 4.30  |
| M   | .181       | .191  | 4.60  | 4.95  |
| N   | .165       | .177  | 4.20  | 4.50  |
| O   | 1.184      | 1.192 | 30.10 | 30.30 |
| P   | .217       | .244  | 5.50  | 6.20  |
| Q   | M4*8       |       |       |       |

NOTE :

(1) Pulse Test: Pulse Width 300  $\mu$  sec, Duty < 2%

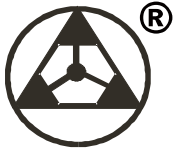


Figure.1 - Typical Forward Characteristics

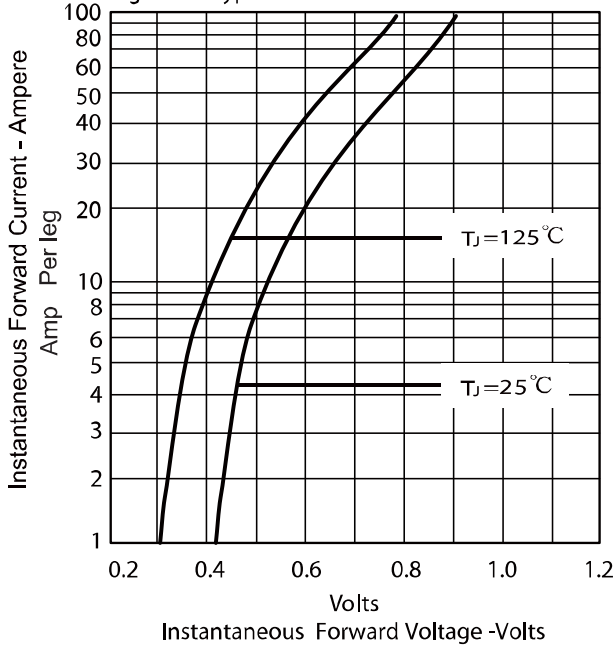


Figure .2- Forward Derating Curve

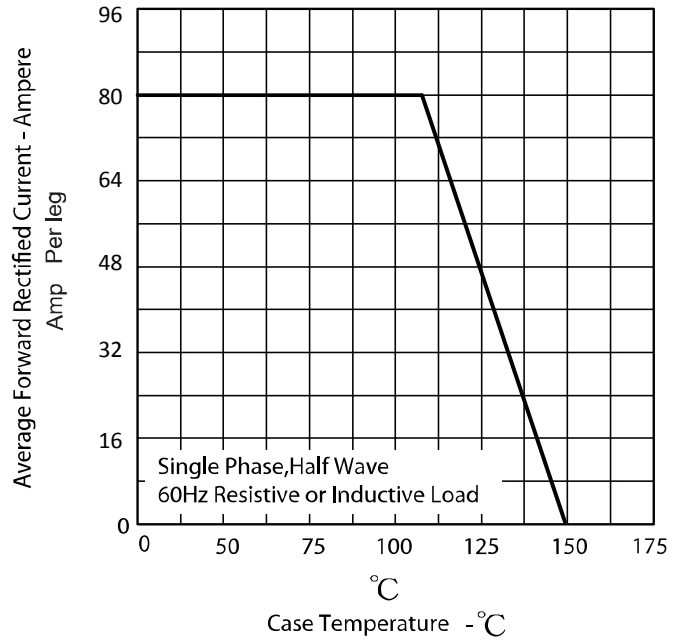


Figure.3 - Peak Forward Surge Current

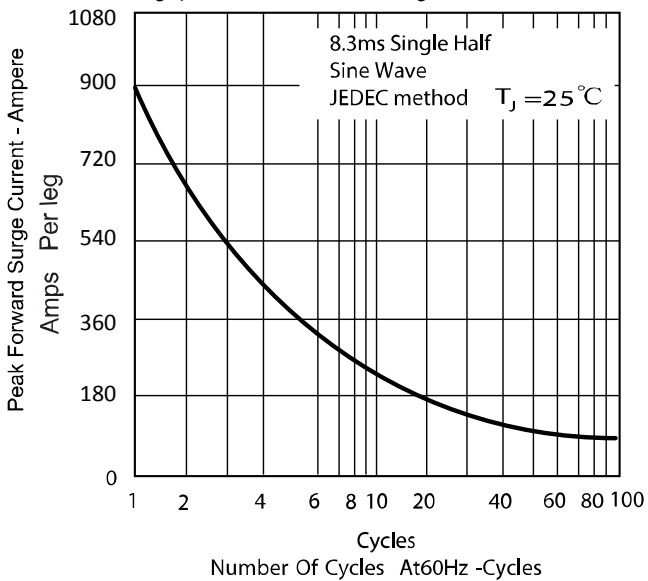


Figure.4 - Typical Reverse Characteristics

