

SCHOTTKY DIODE MODULE TYPE 160A

Features

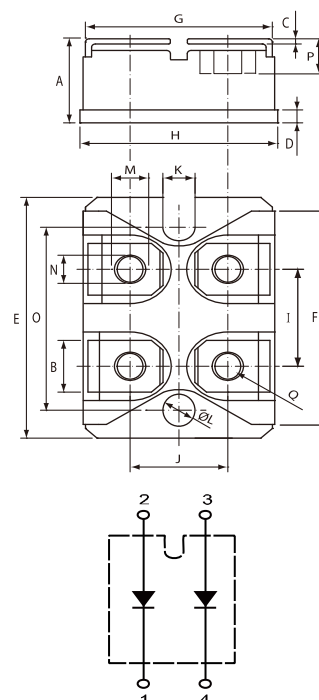
- High Surge Capability
- Type 60V V_{RRM}
- Isolation Type Package
- Electrically Isolation base plate
- RoHS compliant



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 |
|---------------|--|---------------------|-----------------------------|
| MBR12X80-060A | 60V | 42V | 60V |



Electrical Characteristics @ 25 °C Unless Otherwise Specified.

| | | | |
|---|-----------------|------------------------|--|
| Average Forward Current (Per pkg) | $I_{F(AV)}$ | 160A | $T_c = 110\text{ }^\circ\text{C}$ |
| Peak Forward Surge Current (Per leg) | I_{FSM} | 900A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage NOTE(1) (Per leg) | V_F | 0.70V 0.75V | $I_{FM} = 80A; T_J = 125\text{ }^\circ\text{C}$ $I_{FM} = 80A; T_J = 25\text{ }^\circ\text{C}$ |
| Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg) NOTE(1) | I_R | 1 mA 10 mA 30 mA | $T_J = 25\text{ }^\circ\text{C}$ $T_J = 100\text{ }^\circ\text{C}$ $T_J = 150\text{ }^\circ\text{C}$ |
| Isolation Voltage | V_{iso} | 2500V | A.C. 1 minute |
| Maximum Thermal Resistance Junction To Case (Per leg) | $R_{\theta jc}$ | 0.60°C/W | |
| Mounting torque | N-m | 1.1 | M4 Screw |

NOTE :

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

MBR1 2X80 xxxA

| DIM | DIMENSIONS | | | |
|-----|------------|-------|-------|-------|
| | INCHES | | MM | |
| | MIN | MAX | MIN | MAX |
| 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 | | | |



Figure.1 - Typical Forward Characteristics

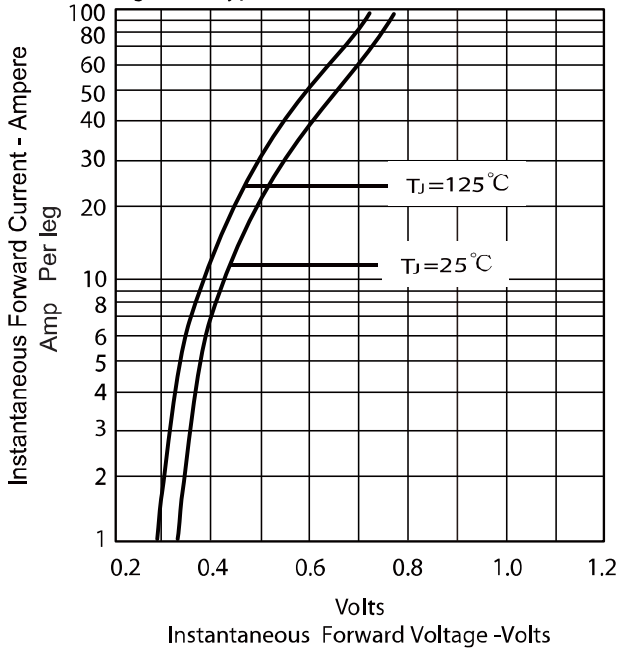


Figure .2- Forward Derating Curve

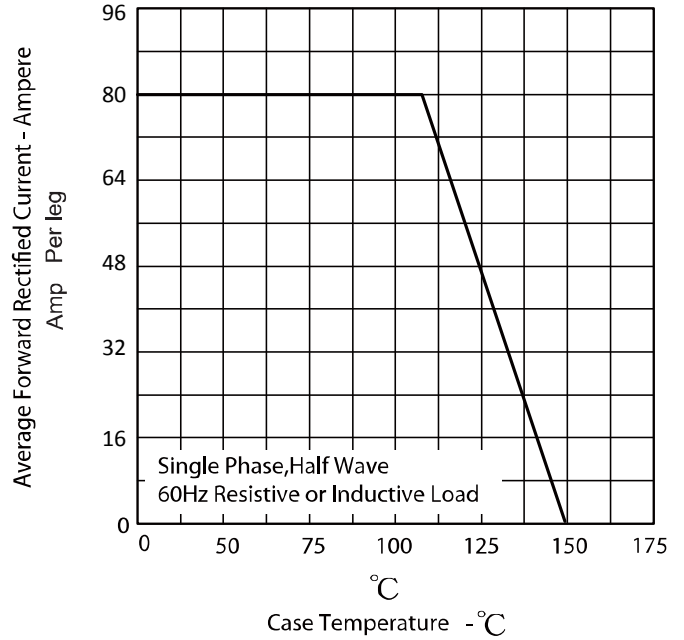


Figure.3 - Peak Forward Surge Current

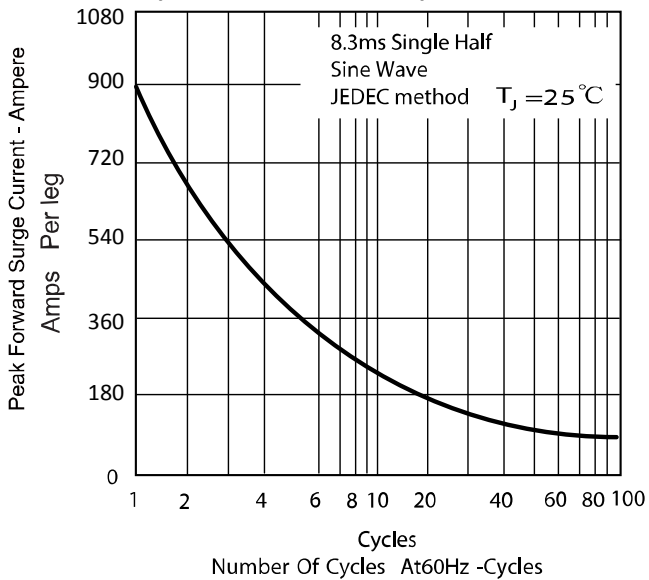


Figure.4 - Typical Reverse Characteristics

