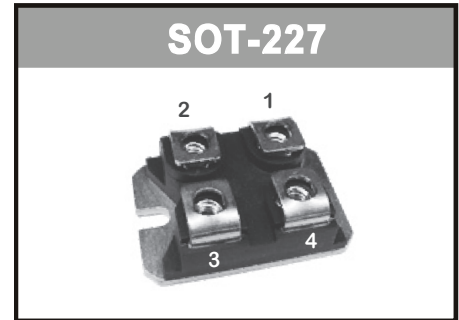




SCHOTTKY DIODE MODULE TYPE 2X100A / 180V

Features

- High Surge Capability
- Type 180V V_{RRM}
- Isolation Type Package
- Electrically Isolation Base Plate
- RoHS Compliant

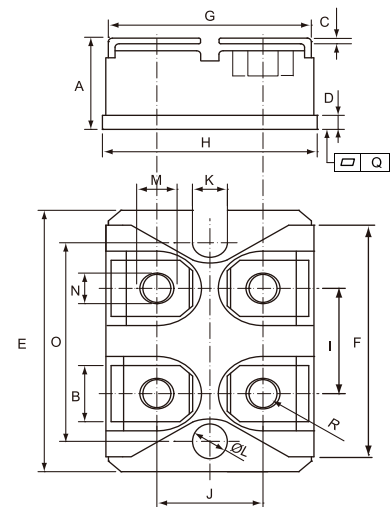


Maximum Ratings

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

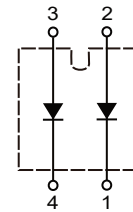
Storage Temperature : -40°C to +150°C

| Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|----------------|--|---------------------|-----------------------------|
| MBRI2X100-180A | 180V | 126V | 180V |



Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-----------------|---------------------|---|
| Average Forward Current (Per pkg) (Per diode) | $I_{F(AV)}$ | 200A 100A | $T_C = 110^\circ\text{C}$ |
| Peak Forward Surge Current (Per diode) | I_{FSM} | 1400A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage* (Per diode) | V_F | 0.82V 0.92V | $I_{FM} = 100\text{A}; T_J = 125^\circ\text{C}$ $I_{FM} = 100\text{A}; T_J = 25^\circ\text{C}$ |
| Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage* (Per diode) | I_R | 3mA 10mA 30mA | $T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$ $T_J = 150^\circ\text{C}$ |
| Isolation Voltage | V_{iso} | 2500V | A.C. 1 minute |
| Maximum Thermal Resistance Junction To Case (Per diode) | $R_{\theta jc}$ | 0.40°C/W | |
| Mounting Torque | | 1.3Nm | M4 Screw |



MBRI 2X100 - xxxA

| | DIMENSIONS | | | |
|---|------------|-------|-------|-------|
| | INCHES | | MM | |
| | MIN | MAX | MIN | MAX |
| A | 0.460 | 0.483 | 11.68 | 12.28 |
| B | 0.307 | 0.323 | 7.80 | 8.20 |
| C | 0.030 | 0.033 | 0.75 | 0.85 |
| D | 0.071 | 0.081 | 1.80 | 2.05 |
| E | 1.488 | 1.504 | 37.80 | 38.20 |
| F | 1.248 | 1.260 | 31.70 | 32.00 |
| G | 0.917 | 0.957 | 23.30 | 24.30 |
| H | 0.996 | 1.008 | 25.30 | 25.60 |
| I | 0.579 | 0.602 | 14.70 | 15.30 |
| J | 0.492 | 0.516 | 12.50 | 13.10 |
| K | 0.161 | 0.169 | 4.10 | 4.30 |
| L | 0.161 | 0.169 | 4.10 | 4.30 |
| M | 0.181 | 0.197 | 4.60 | 5.00 |
| N | 0.165 | 0.181 | 4.20 | 4.60 |
| O | 1.181 | 1.197 | 30.00 | 30.40 |
| Q | -0.002 | 0.004 | -0.05 | 0.10 |
| R | M4*8 | | | |

*Pulse Test: Pulse Width 300 μ sec, Duty Cycle < 2%



Figure.1 - Typical Forward Characteristics

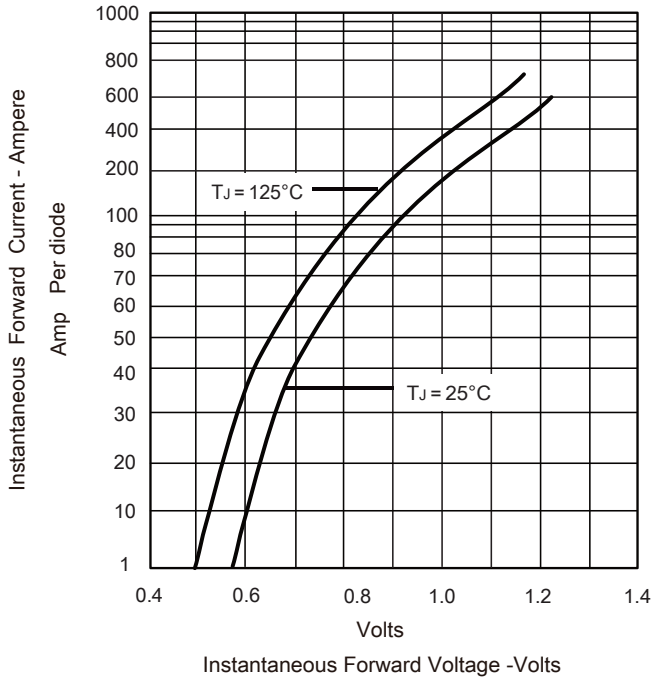


Figure.2 - Forward Derating Curve

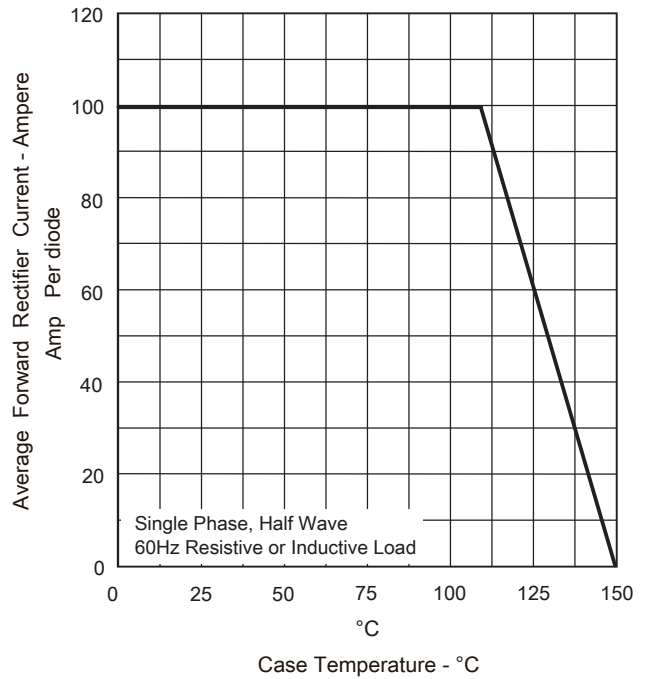


Figure.3 - Peak Forward Surge Current

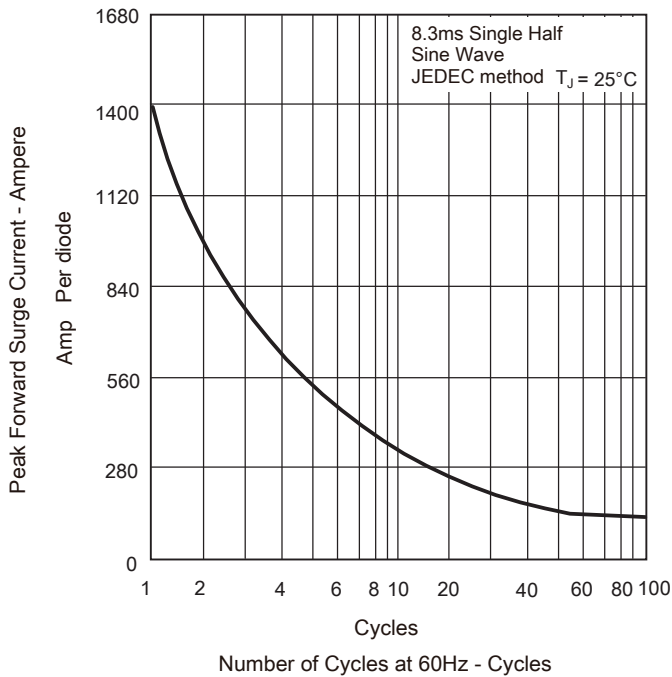
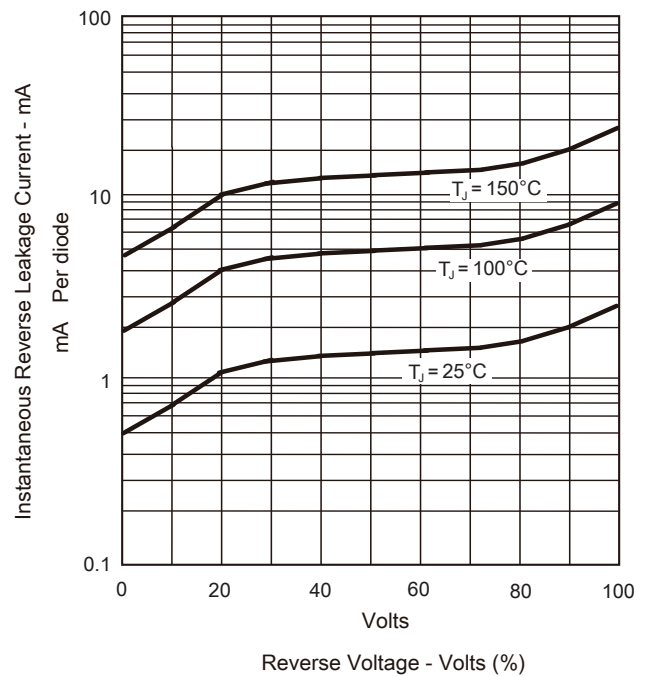


Figure.4 - Typical Reverse Characteristics





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