

## Low V<sub>F</sub> Silicon Power Schottky Diode

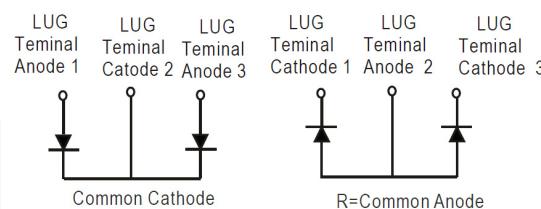
**V<sub>RRM</sub> = 20 V**

**I<sub>F(AV)</sub> = 600 A**

### Features

- High Surge Capability
- Type 20 V V<sub>RRM</sub>
- Isolation Type Package
- Electrically Isolated Base Plate
- Not ESD Sensitive

### Three Tower Package



**Maximum ratings, at T<sub>j</sub> = 25 °C, unless otherwise specified ("R" devices have leads reversed)**

| Parameter                              | Symbol           | Conditions | MBRT60020(R)L | Unit |
|--|------------------|------------|---------------|------|
| Maximum recurrent peak reverse voltage | V <sub>RRM</sub> |            | 20            | V    |
| Maximum RMS voltage                    | V <sub>RMS</sub> |            | 14            | V    |
| Maximum DC blocking voltage            | V <sub>DC</sub>  |            | 20            | V    |
| Operating temperature                  | T <sub>j</sub>   |            | -55 to 150    | °C   |
| Storage temperature                    | T <sub>stg</sub> |            | -55 to 150    | °C   |

**Electrical characteristics, at T<sub>j</sub> = 25 °C, unless otherwise specified**

| Parameter  | Symbol             | Conditions  | MBRT60020(R)L | Unit |
|--|--------------------|---|---------------|------|
| Average forward current (per pkg)  | I <sub>F(AV)</sub> | T <sub>C</sub> = 100 °C                           | 600           | A    |
| Peak forward surge current (per leg)   | I <sub>FSM</sub>   | t <sub>p</sub> = 8.3 ms, half sine                | 4000          | A    |
| Maximum instantaneous forward voltage (per leg)                              | V <sub>F</sub>     | I <sub>FM</sub> = 300 A, T <sub>j</sub> = 25 °C   | 0.58          | V    |
| Maximum instantaneous reverse current at rated DC blocking voltage (per leg) | I <sub>R</sub>     | T <sub>j</sub> = 25 °C<br>T <sub>j</sub> = 100 °C | 3<br>250      | mA   |

### Thermal characteristics

|   |                  |      |      |
|---|------------------|------|------|
| Maximum thermal resistance, junction - case (per leg) | R <sub>θJC</sub> | 0.28 | °C/W |
|---|------------------|------|------|

Figure .1-Typical Forward Characteristics

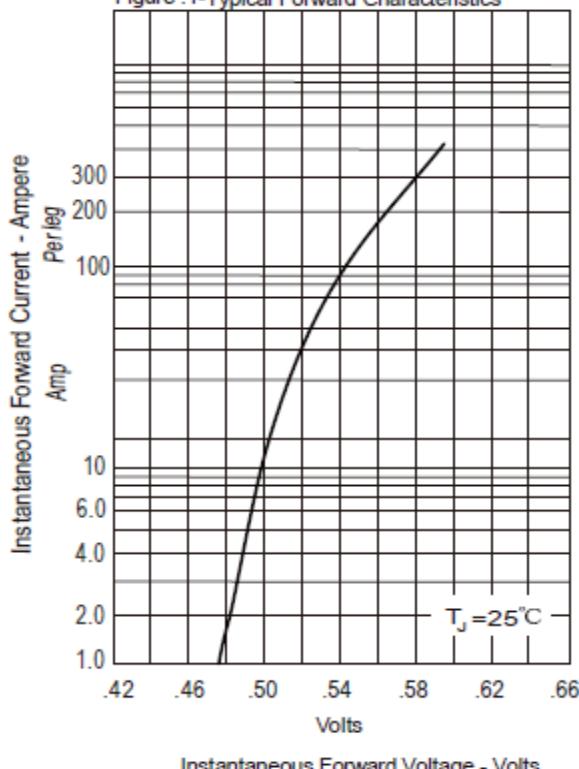
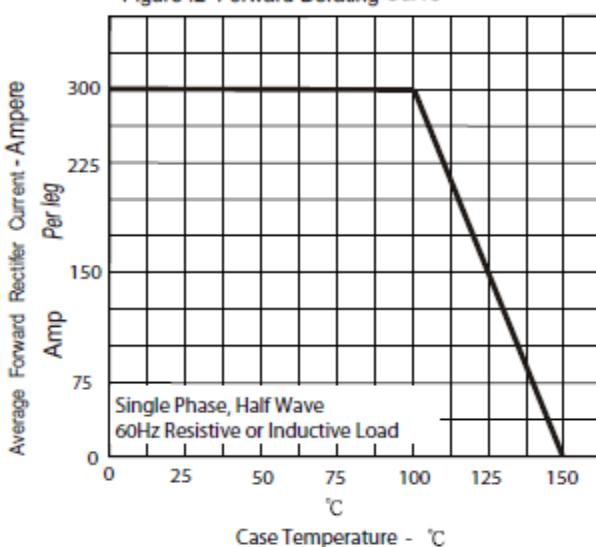
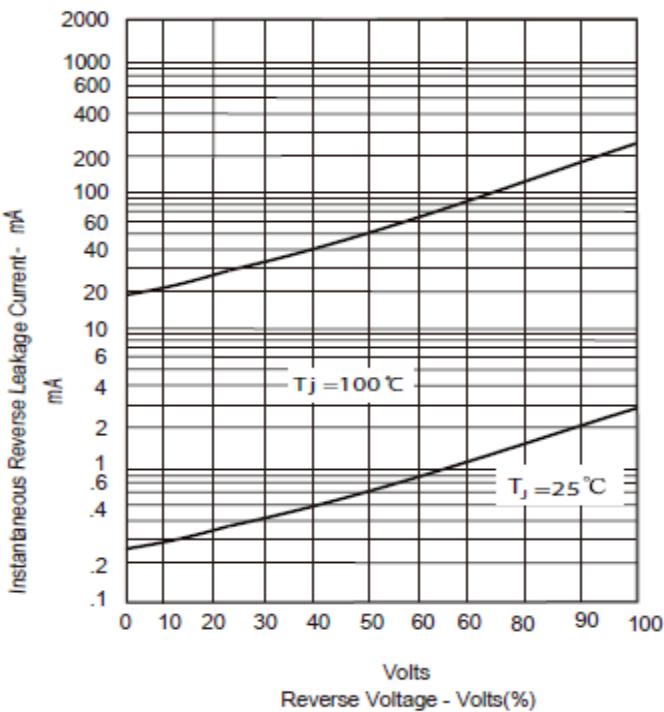


Figure .2-Forward Derating Curve



Instantaneous Forward Voltage - Volts

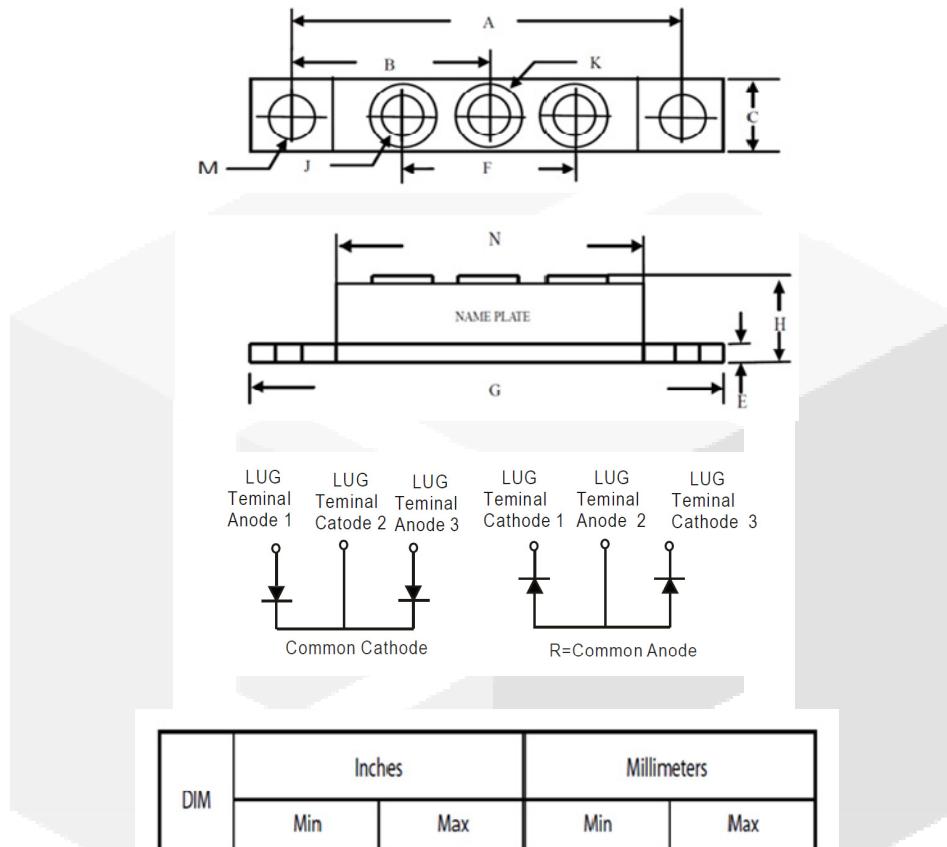
Figure .4-Typical Reverse Characteristics



Number Of Cycles At 60Hz - Cycles

## Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



| 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  |