

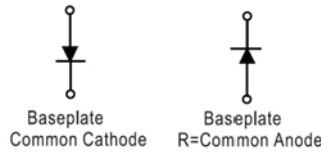
Low V_F Silicon Power Schottky Diode

$V_{RRM} = 20\text{ V}$
 $I_{F(AV)} = 300\text{ A}$

Features

- High Surge Capability
- Type 20 V V_{RRM}
- Not ESD Sensitive

D-67 Package



Maximum ratings, at $T_j = 25\text{ °C}$, unless otherwise specified ("R" devices have leads reversed)

| Parameter | Symbol | Conditions | MBRH30020(R)L | Unit |
|--|-----------|------------|---------------|------|
| Maximum recurrent peak reverse voltage | V_{RRM} | | 20 | V |
| Maximum RMS voltage | V_{RMS} | | 14 | V |
| Maximum DC blocking voltage | V_{DC} | | 20 | V |
| Operating temperature | T_j | | -55 to 150 | °C |
| Storage temperature | T_{stg} | | -55 to 150 | °C |

Electrical characteristics, at $T_j = 25\text{ °C}$, unless otherwise specified

| Parameter | Symbol | Conditions | MBRH30020(R)L | Unit |
|--|-------------|--|---------------|------|
| Average forward current | $I_{F(AV)}$ | $T_C = 100\text{ °C}$ | 300 | A |
| Peak forward surge current | I_{FSM} | $t_p = 8.3\text{ ms}$, half sine | 4000 | A |
| Maximum instantaneous forward voltage | V_F | $I_{FM} = 300\text{ A}$, $T_j = 25\text{ °C}$ | 0.58 | V |
| Maximum instantaneous reverse current at rated DC blocking voltage | I_R | $T_j = 25\text{ °C}$ | 3 | mA |
| | | $T_j = 100\text{ °C}$ | 200 | |

Thermal characteristics

| | | | | |
|---|-----------------|--|------|------|
| Maximum thermal resistance, junction - case | $R_{\theta JC}$ | | 0.28 | °C/W |
|---|-----------------|--|------|------|

Figure .1-Typical Forward Characteristics

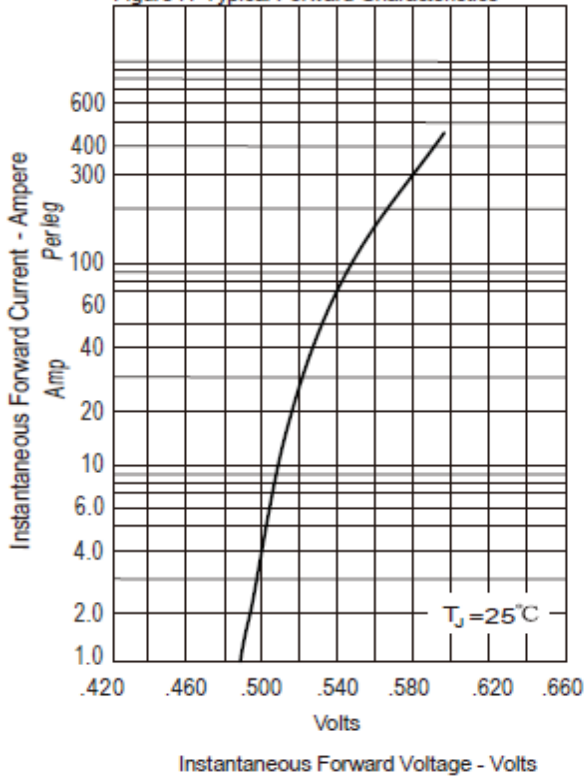


Figure .2- Forward Derating Curve

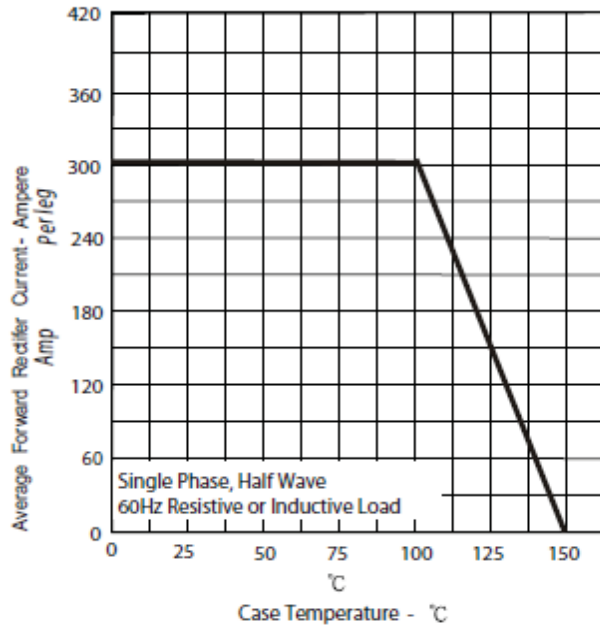


Figure.3-Peak Forward Surge Current

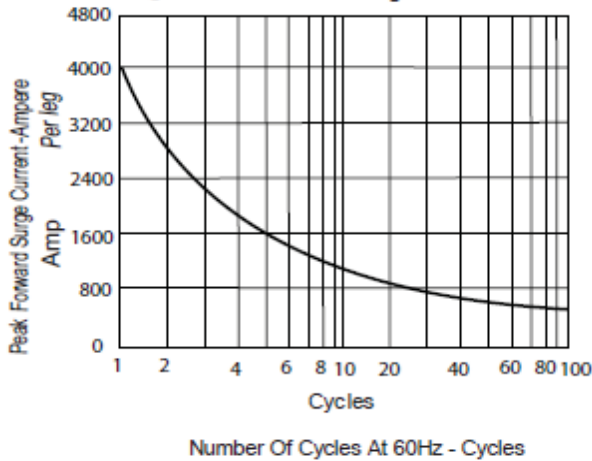
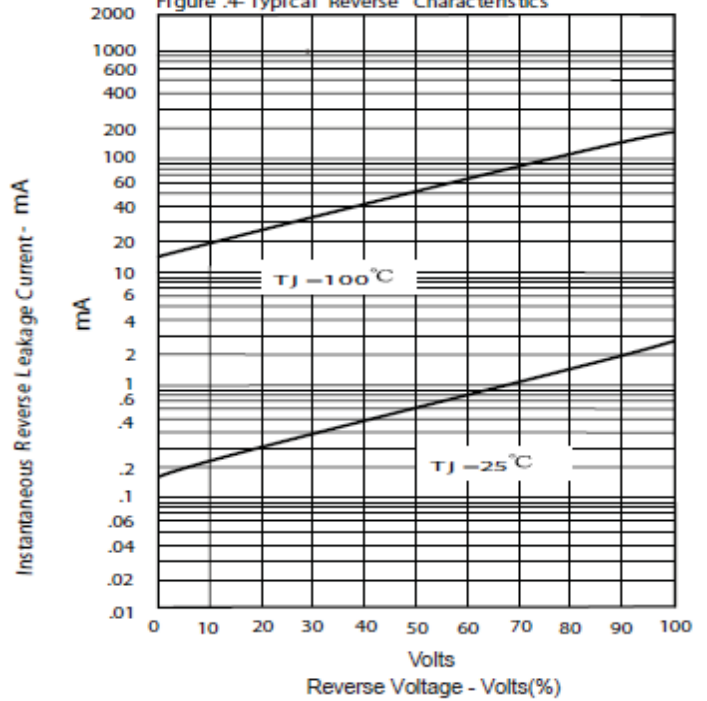
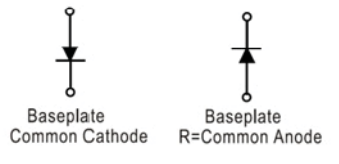
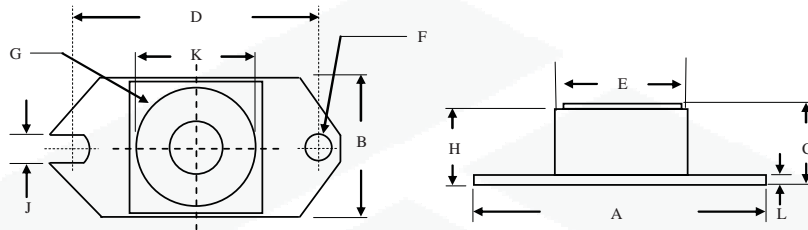


Figure .4-Typical Reverse Characteristics



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



| | Inches | | Millimeters | |
|---|------------|-------|-------------|-------|
| | Min | Max | Min | Max |
| A | 1.515 | 1.560 | 38.48 | 39.62 |
| B | 0.725 | 0.775 | 18.42 | 19.69 |
| C | 0.595 | 0.625 | 15.11 | 15.88 |
| D | 1.182 | 1.192 | 30.02 | 30.28 |
| E | 0.736 | 0.744 | 18.70 | 18.90 |
| F | 0.152 | 0.160 | 3.86 | 4.061 |
| G | 1/4-20 UNC | | | |
| H | 0.540 | 0.580 | 13.72 | 14.73 |
| J | 0.156 | 0.160 | 3.96 | 4.06 |
| K | 0.480 | 0.492 | 12.20 | 12.50 |
| L | 0.120 | 0.130 | 3.05 | 3.30 |