

## SCHOTTKY DIODES STUD TYPE 60 A

### Features

High Surge Capability  
Types up to 100V  $V_{RRM}$

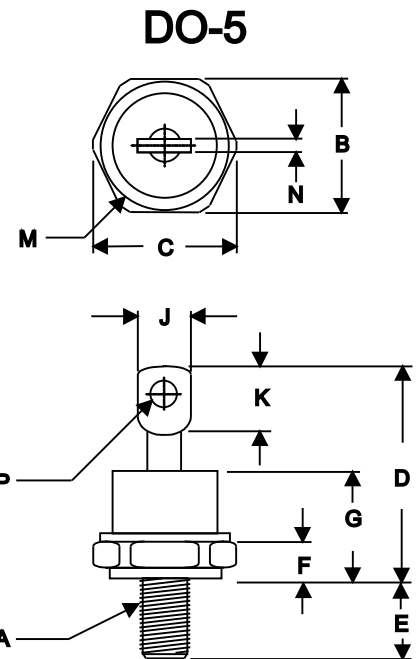
60Amp Rectifier  
20-100 Volts

### Maximum Ratings

Operating Temperature: -65 °C to +150 °C

Storage Temperature: -65 °C to +175 °C

| Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-------------|--|---------------------|-----------------------------|
| MBR6020(R)  | 20V                                    | 14V                 | 20V                         |
| MBR6030(R)  | 30V                                    | 21V                 | 30V                         |
| MBR6035(R)  | 35V                                    | 25V                 | 35V                         |
| MBR6040(R)  | 40V                                    | 28V                 | 40V                         |
| MBR6045(R)  | 45V                                    | 32V                 | 45V                         |
| MBR6060(R)  | 60V                                    | 42V                 | 60V                         |
| MBR6080(R)  | 80V                                    | 50V                 | 80V                         |
| MBR60100(R) | 100V                                   | 70V                 | 100V                        |



Notes:

- Standard Polarity: Stud is Cathode
- Reverse Polarity: Stud is Anode

### Electrical Characteristics @ 25 °C Unless Otherwise Specified

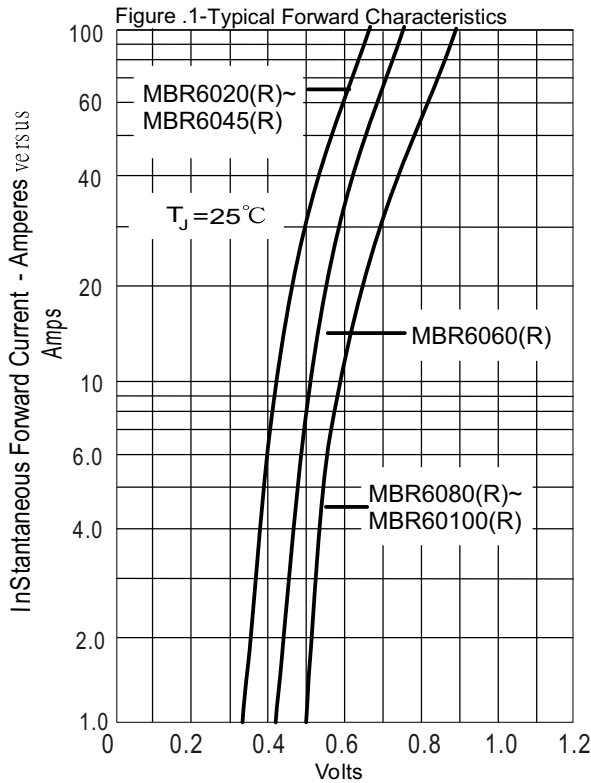
|  |                 |                         |  |
|--|-----------------|-------------------------|--|
| Average Forward Current  | $I_{F(AV)}$     | 60A                     | $T_c = 100^\circ\text{C}$  |
| Peak Forward Surge Current   | $I_{FSM}$       | 700A                    | 8.3ms, half sine   |
| Maximum Instantaneous Forward Voltage <small>NOTE (1)</small>                              | $V_F$           | 0.65V<br>0.75V<br>0.84V | (MBR6020~MBR6045)<br>(MBR6060)<br>(MBR6080~MBR60100)<br>$I_{FM} = 60\text{ A}; T_J = 25^\circ\text{C}$ |
| Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage <small>NOTE (1)</small> | $I_R$           | 5.0mA<br>150 mA         | $T_J = 25^\circ\text{C}$<br>$T_J = 125^\circ\text{C}$  |
| Maximum Thermal Resistance, Junction To Case   | $R_{\theta jc}$ | 1.0°C/W                 |  |
| Mounting torque  | Kgf-cm          | 23~34                   | Not lubricated threads   |

NOTE :

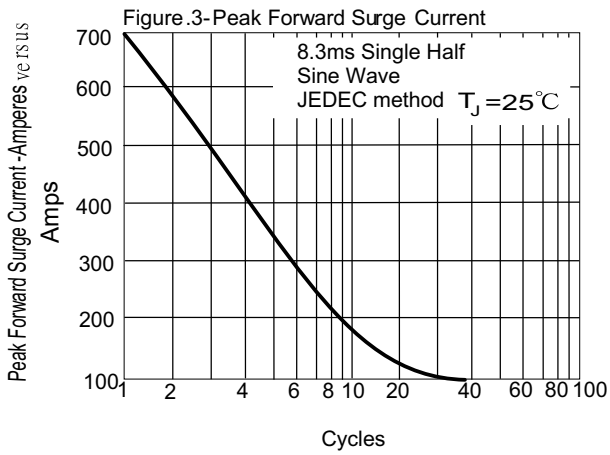
- (1) Pulse Test: Pulse Width 300 usec, Duty Cycle < 2%

| DIM | DIMENSIONS                       |       |       |       | NOTE |
|-----|----------------------------------|-------|-------|-------|------|
|     | INCHES                           |       | MM    |       |      |
|     | MIN                              | MAX   | MIN   | MAX   |      |
| A   | 1/4-28 Threads Standard Polarity |       |       |       |      |
| B   | .669                             | .687  | 17.19 | 17.44 |      |
| C   | ----                             | .794  | ----  | 20.16 |      |
| D   | ----                             | 1.020 | ----  | 25.91 |      |
| E   | .422                             | .453  | 10.72 | 11.50 |      |
| F   | .115                             | .200  | 2.93  | 5.08  |      |
| G   | ----                             | .460  | ----  | 11.68 |      |
| H   | ----                             | ----  | ----  | ----  |      |
| J   | ----                             | .375  | ----  | 9.52  |      |
| K   | .156                             | ----  | 3.96  | ----  |      |
| M   | ----                             | .667  | ----  | 16.94 |      |
| N   | ----                             | .080  | ----  | 2.03  |      |
| P   | .140                             | .175  | 3.56  | 4.45  |      |

# MBR6020(R) THRU MBR60100(R)



Instantaneous Forward Voltage - Volts



Number Of Cycles At 60Hz - Cycles

