

SCHOTTKY DIODES STUD TYPE 75A

Features

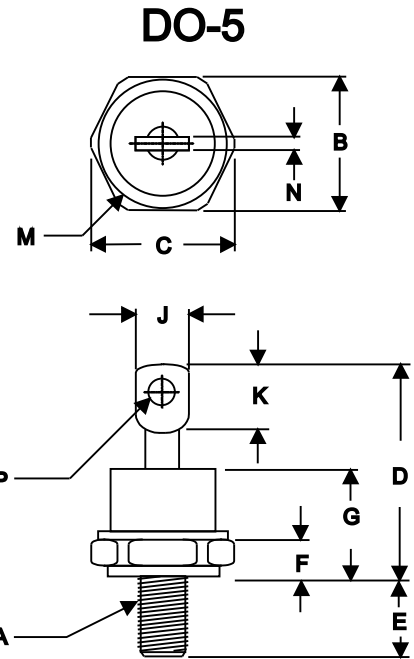
High Surge Capability
Types up to 100V_{V_{RRM}}

75Amp 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 |
|-------------|--|---------------------|-----------------------------|
| MBR7520(R) | 20V | 14V | 20V |
| MBR7530(R) | 30V | 21V | 30V |
| MBR7535(R) | 35V | 25V | 35V |
| MBR7540(R) | 40V | 28V | 40V |
| MBR7545(R) | 45V | 32V | 45V |
| MBR7560(R) | 60V | 42V | 60V |
| MBR7580(R) | 80V | 50V | 80V |
| MBR75100(R) | 100V | 70V | 100V |



Notes:
1. Standard Polarity: Stud is Cathode
2. Reverse Polarity: Stud is Anode

Electrical Characteristics @ 25 °C Unless Otherwise Specified

| Parameter | Symbol | 75A | T _c = 100 °C |
|--|--------------------|-------------------------|---|
| Average Forward Current | I _{F(AV)} | 75A | T _c = 100 °C |
| Peak Forward Surge Current | I _{FSM} | 1000A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage | V _F | 0.65V 0.75V 0.84V | (MBR7520~MBR7545) (MBR7560) (MBR7580~MBR75100) I _{FM} = 75 A ; T _J = 25 °C |
| Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage | I _R | 5.0mA 150 mA | T _J = 25 °C T _J = 125 °C |
| Maximum Thermal Resistance, Junction To Case | R _{θjc} | 1.0°C/W | |
| Mounting torque | Kgf-cm | 23~34 | Not lubricated threads |

| 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 | |

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

MBR7520(R) THRU MBR75100(R)

Figure .1- Typical Forward Characteristics

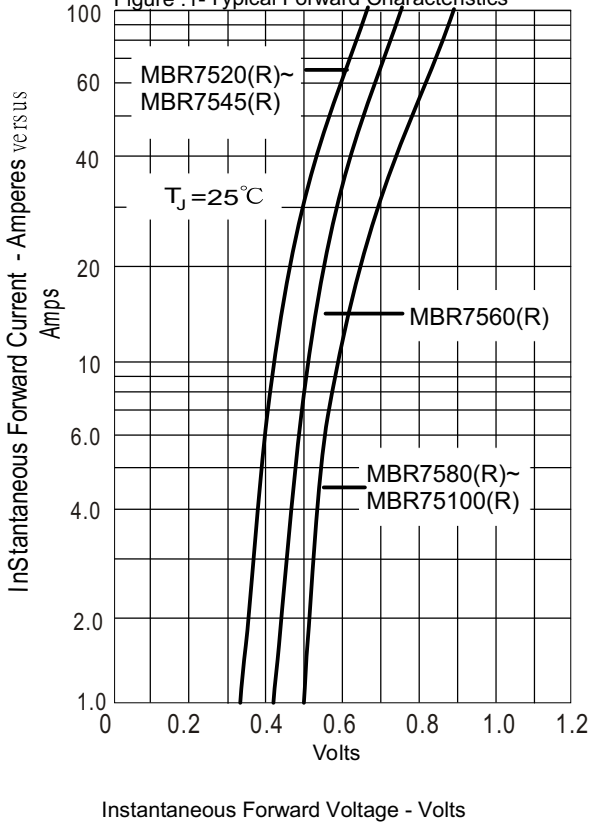


Figure .2- Forward Derating Curve

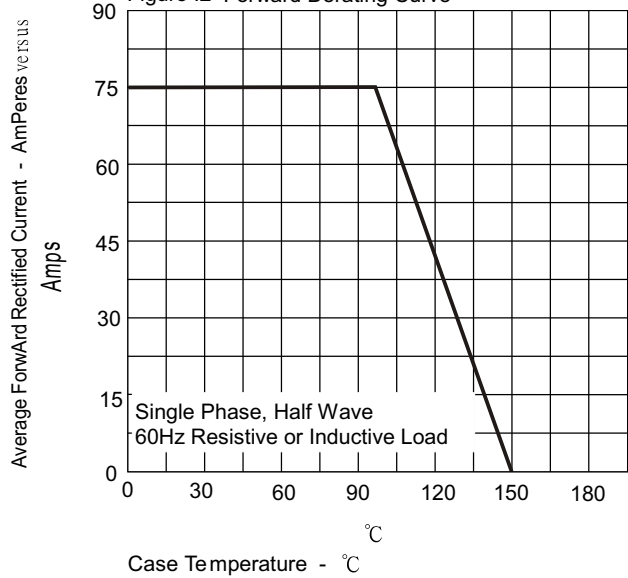


Figure .3- Peak Forward Surge Current

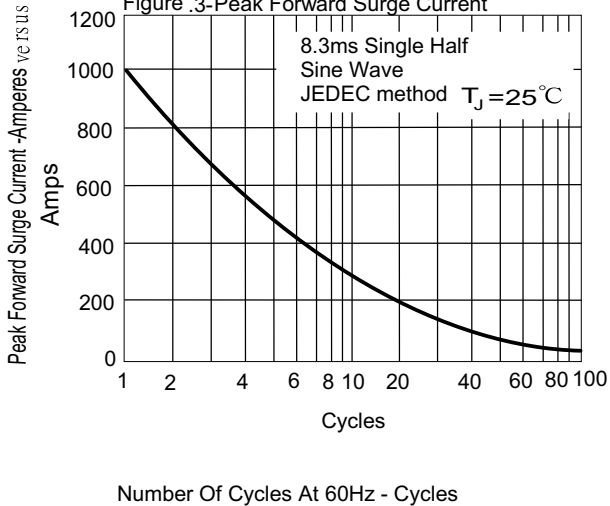


Figure .4- Typical Reverse Characteristics

