



SCHOTTKY DIODE MODULE TYPES
120A / 20-100V

Features

High Surge Capability
Types Up to 100V V_{RRM}

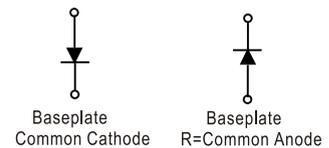
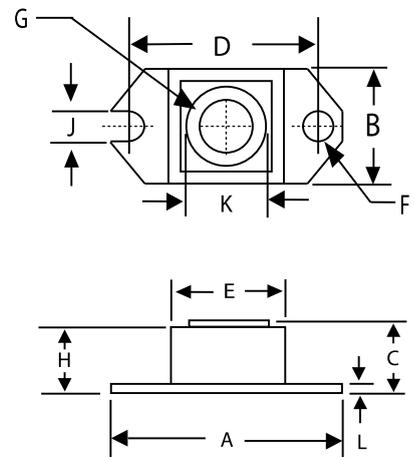
120 Amp Rectifier
20-100 Volts

Maximum Ratings

Operating Temperature: -55°C to $+150^{\circ}\text{C}$
Storage Temperature: -55°C to $+150^{\circ}\text{C}$

HALF PACK (D-67)

| Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|---------------|--|---------------------|-----------------------------|
| MBRH12020(R) | 20V | 14V | 20V |
| MBRH12030(R) | 30V | 21V | 30V |
| MBRH12035(R) | 35V | 25V | 35V |
| MBRH12040(R) | 40V | 28V | 40V |
| MBRH12045(R) | 45V | 32V | 45V |
| MBRH12060(R) | 60V | 42V | 60V |
| MBRH12080(R) | 80V | 57V | 80V |
| MBRH120100(R) | 100V | 70V | 100V |



Electrical Characteristics @ 25 °C Unless Otherwise Specified

| | | | |
|--|-----------------|-------------------------|--|
| Average Forward Current (Per pkg) | $I_{F(AV)}$ | 120A | $TC=125^{\circ}\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 2000A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage 20V~45V 50V~60V 80V~100V | V_F | 0.70V 0.75V 0.84V | $I_{FM}=120\text{ A}; T_J=25^{\circ}\text{C}$ |
| Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage NOTE (1) | I_R | 1mA 10mA 30mA | $T_J=25^{\circ}\text{C}$ $T_J=100^{\circ}\text{C}$ $T_J=150^{\circ}\text{C}$ |
| Maximum Thermal Resistance Junction To Case | $R_{\theta jc}$ | 0.48°C/W | |

| DIM | DIMENSIONS | | | | NOTE |
|-----|-------------|-------|-------|-------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | 1.515 | 1.560 | 38.48 | 39.62 | |
| B | .725 | .775 | 18.42 | 19.69 | |
| C | .595 | .625 | 15.11 | 15.88 | |
| D | 1.182 | 1.192 | 30.02 | 30.28 | |
| E | .736 | .744 | 18.70 | 18.90 | |
| F | .152 | .160 | 3.86 | 4.061 | ∅ |
| G | 1/4- 20 UNC | | | | |
| H | .540 | .580 | 13.72 | 14.73 | |
| J | .156 | .160 | 3.96 | 4.06 | |
| K | .480 | .492 | 12.20 | 12.50 | ∅ |
| L | .120 | .130 | 3.05 | 3.30 | |

NOTE :

(1) Pulse Test: Pulse Width 300 μ sec, Duty < 2%



Figure .1- Typical Forward Characteristics

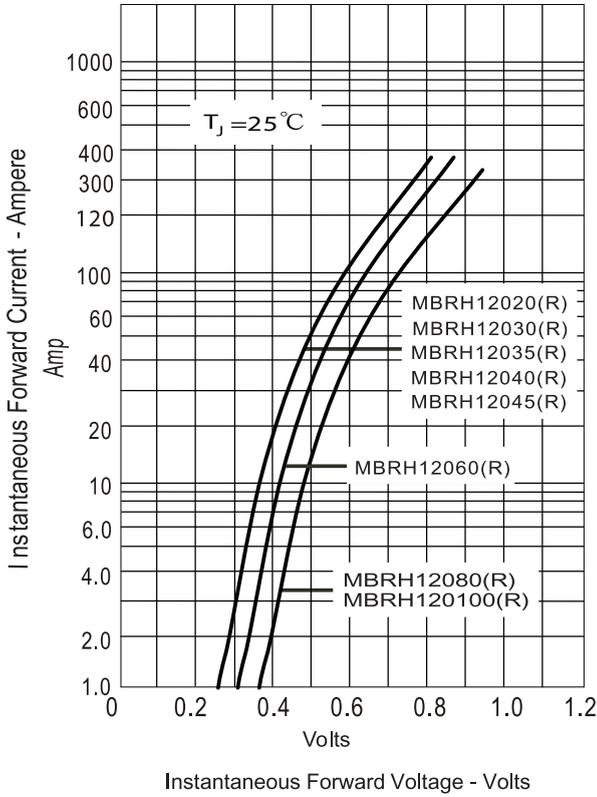


Figure .2- Forward Derating Curve

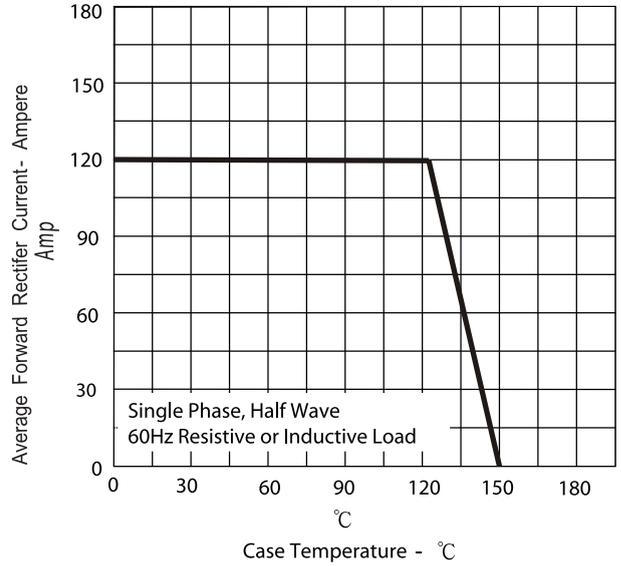


Figure.3-Peak Forward Surge Current

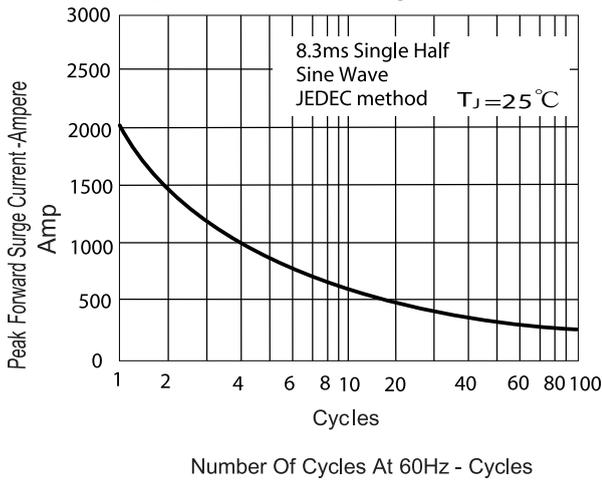
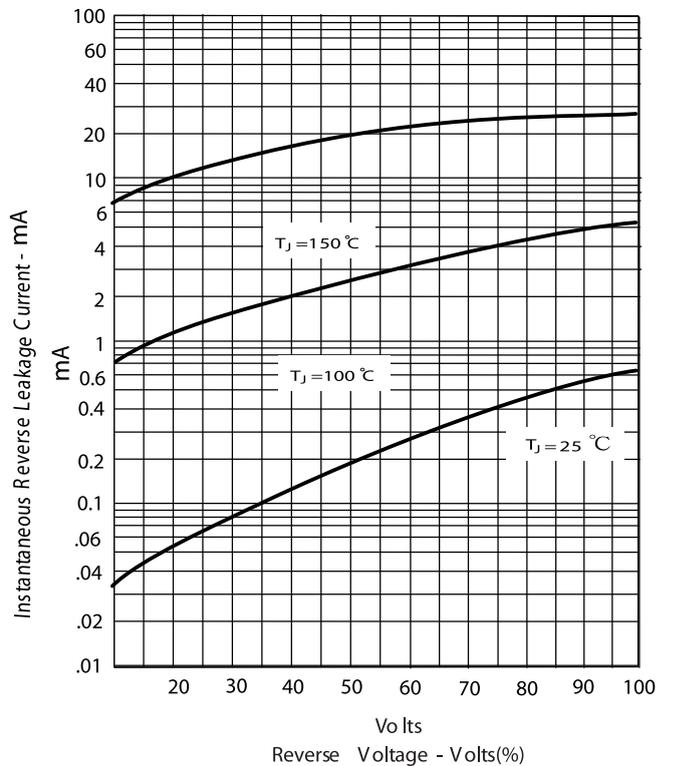


Figure .4- Typical Reverse Characteristics





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