



SCHOTTKY DIODE MODULE TYPES 600A

Features

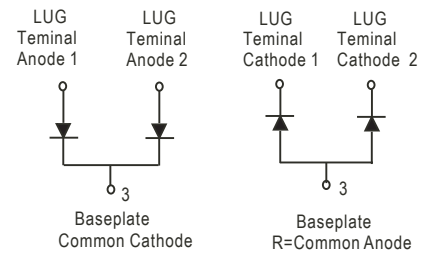
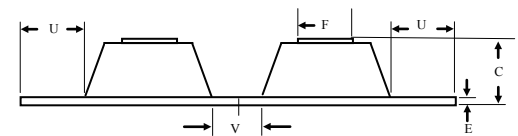
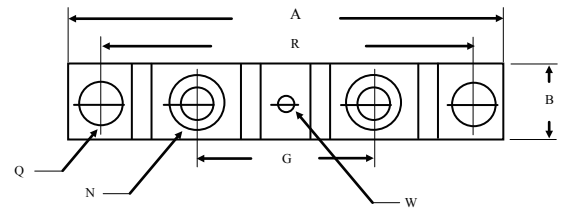
High surge Capability
Types Up to 100V V_{RRM}

600Amp Rectifier
20-100 Volts

HEAVY TWIN TOWER

Maximum Ratings

Operating Temperature: -55°C to +150°C
Storage Temperature: -55°C to +150°C



| Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------------------------------|---------------------|-----------------------------|
| MBRA60020CT(R) | 20V | 14V | 20V |
| MBRA60030CT(R) | 30V | 21V | 30V |
| MBRA60035CT(R) | 35V | 25V | 35V |
| MBRA60040CT(R) | 40V | 28V | 40V |
| MBRA60045CT(R) | 45V | 32V | 45V |
| MBRA60060CT(R) | 60V | 42V | 60V |
| MBRA60080CT(R) | 80V | 56V | 80V |
| MBRA600100CT(R) | 100V | 70V | 100V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|------------------------------------------------------------------------------------------|-----------------|-------------------------|------------------------------------------------------------------|
| Average Forward Current (Per pkg) | $I_{F(AV)}$ | 600A | $T_C = 100^\circ C$ |
| Peak Forward Surge Current (Per leg) | I_{FSM} | 4000A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage (Per leg) 20V~45V 50V~60V 80V~100V | V_F | 0.70V 0.75V 0.84V | $I_{FM}=300A; T_J=25^\circ C$ |
| Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg) NOTE (1) | I_R | 1 mA 10 mA 50 mA | $T_J = 25^\circ C$ $T_J = 100^\circ C$ $T_J = 150^\circ C$ |
| Maximum Thermal Resistance Junction To Case (Per leg) | $R_{\theta jc}$ | 0.28°C/W | |

NOTE :

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

| DIM | Inches | | Millimeters | |
|-----|----------------|-------|-------------|------|
| | Min | Max | Min | Max |
| A | ---- | 3.64 | ---- | 92.3 |
| B | 1.06 | 1.067 | 26.9 | 27.1 |
| C | ---- | 0.740 | ---- | 18.8 |
| E | 0.134 | 0.14 | 3.4 | 3.55 |
| F | 0.520 | 0.527 | 13.2 | 13.4 |
| G | 1.49 | BSC | 38.0 | BSC |
| N | 1/4-20UNC FULL | | | |
| Q | 0.275 | 0.290 | 6.99 | 7.37 |
| R | 3.150 | BSC | 80.01 | BSC |
| U | 0.512 | ---- | 13.0 | ---- |
| V | 0.449 | 0.472 | 11.4 | 12.0 |
| W | 0.180 | 0.195 | 4.57 | 4.95 |



Figure.1-Typical Forward Characteristics

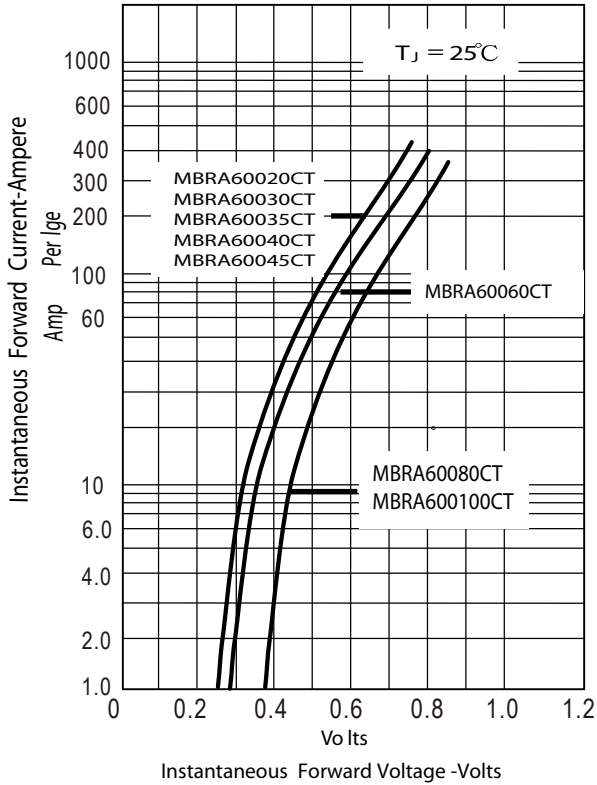


Figure.2-Forward Derating Curve

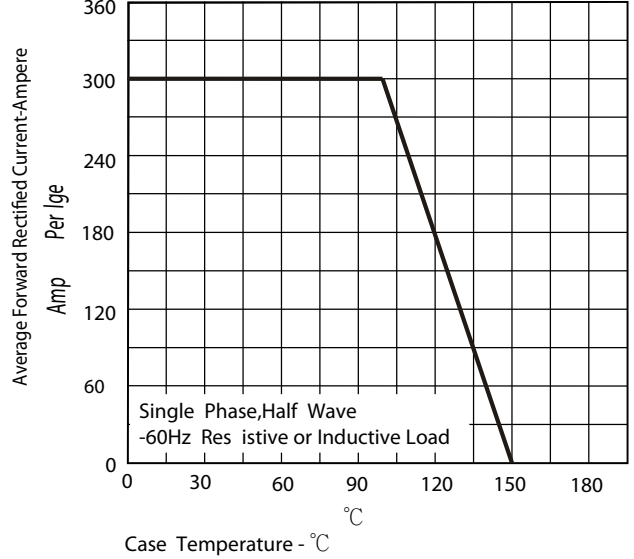


Figure.3-Peak Forward Surge Current

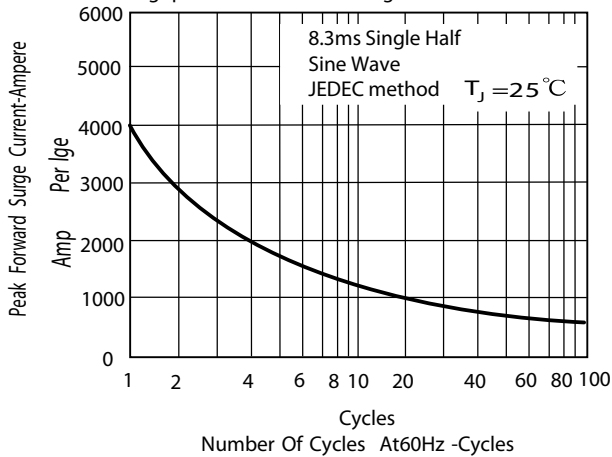


Figure.4-Typical Reverse Characteristics

