



SUPER FAST DIODE MODULE TYPE

Features

- High Surge Capability
- Isolation Type Package
- Electrically Isolation base plate

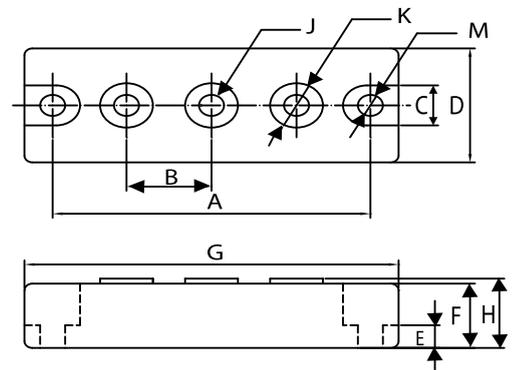
**500 Amp Rectifier
1200 Volt**

Maximum Ratings

Operating Temperature: -55 °C to +175 °C
Storage Temperature: -55 °C to +175 °C

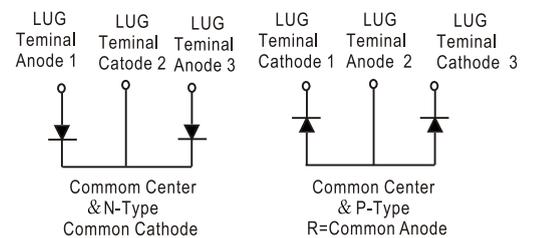
| | | |
|----------------|--|-----------------------------|
| Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum DC Blocking Voltage |
| MURTA500120(R) | 1200V | 1200V |

HEAVY THREE TOWER



Electrical Characteristics @ 25 °C Unless Otherwise Specified

| | | | |
|--|-----------------|--------------------|---|
| Average Forward Current (Per pkg) | $I_{F(AV)}$ | 500 A | $T_C = 100^\circ C$ |
| Peak Forward Surge Current (Per leg) | I_{FSM} | 3800A | 8.3ms , half Sine |
| Maximum Instantaneous Forward Voltage* (Per leg) | V_F | 2.6V | $I_{FM} = 250A;$ $T_J = 25^\circ C$ |
| Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg) | I_R | 25 μA 5 mA | $T_J = 25^\circ C$ $T_J = 125^\circ C$ |
| Maximum Reverse Recovery Time (Per leg) | T_{rr} | 250ns | $I_F = 0.5A, I_R = 1.0A,$ $I_{RR} = 0.25A$ |
| Maximum Thermal Resistance Junction To Case (Per leg) | $R_{\theta jc}$ | 0.30 °C/W | |
| Weight | | 193g | |



| DIMENSIONS | | | | |
|------------|-----------------|-------|-------------|-------|
| DIM | Inches | | Millimeters | |
| | Min | Max | Min | Max |
| A | 3.150 | NOM | 80.01 | NOM |
| B | .872 | .892 | 22.15 | 22.65 |
| C | .465 | .479 | 11.82 | 12.18 |
| D | 1.337 | 1.356 | 33.95 | 34.45 |
| E | .230 | .234 | 5.84 | 6.16 |
| F | .725 | REF | 18.42 | REF |
| G | 3.668 | 3.768 | 93.17 | 95.71 |
| H | — | .791 | — | 20.10 |
| J | 1/4-20 UNC FULL | | | |
| K | .509 | .538 | 12.92 | 13.68 |
| M | .238 | .258 | 6.05 | 6.55 |

*Pulse Test: Pulse Width 300 μsec , Duty Cycle 2%



Figure .1- Typical Forward Characteristics

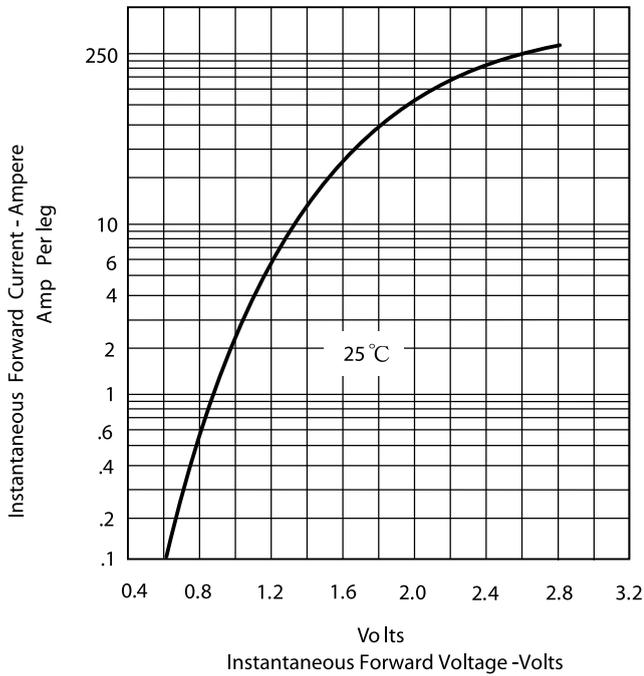


Figure .2- Forward Derating Curve

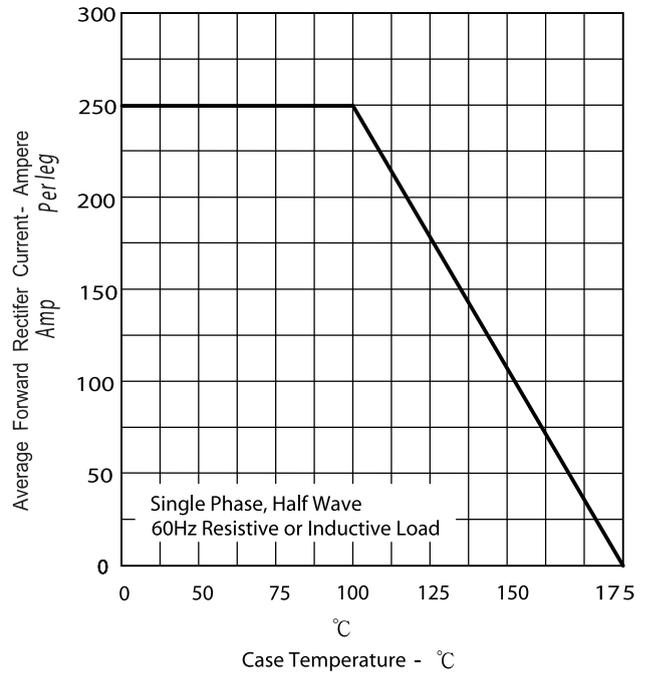


Figure .3- Peak Forward Surge Current

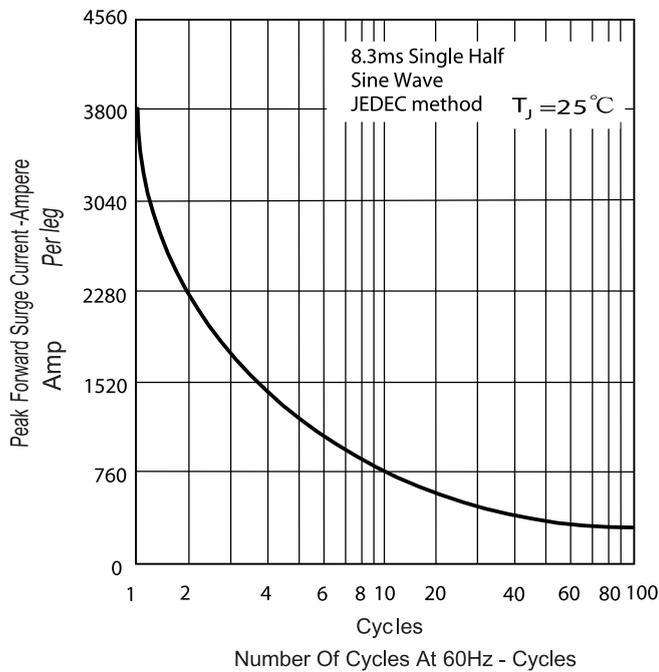
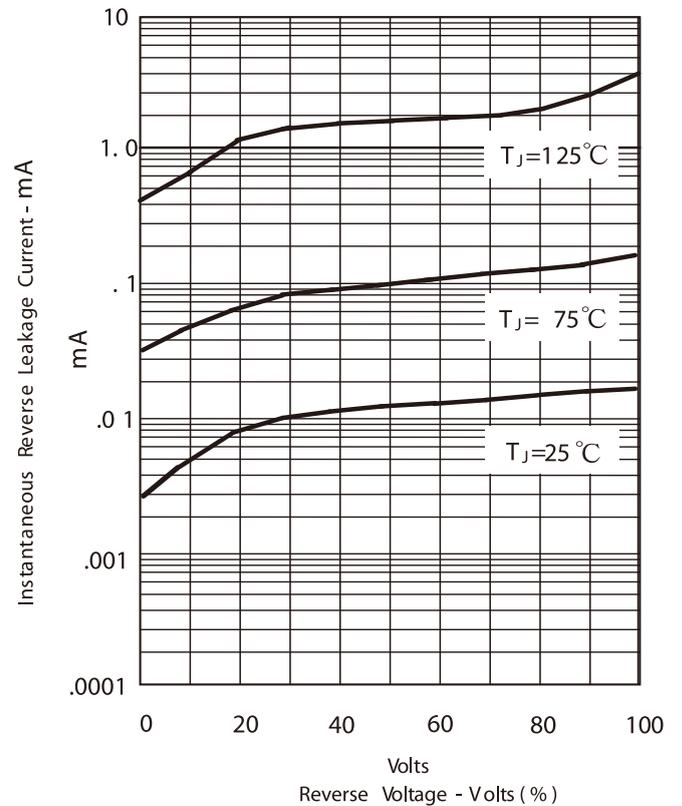


Figure .4 -Typical Reverse Characteristics





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