



SUPER FAST DIODE MODULE TYPE 2X120 A

Features

High Surge Capability
Type 400V V_{RRM}
Isolation Type Package
Electrically Isolation base plate

Maximum Ratings

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

| Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|---------------|--|---------------------|-----------------------------|
| MURI2X121-04A | 400V | 280V | 400V |

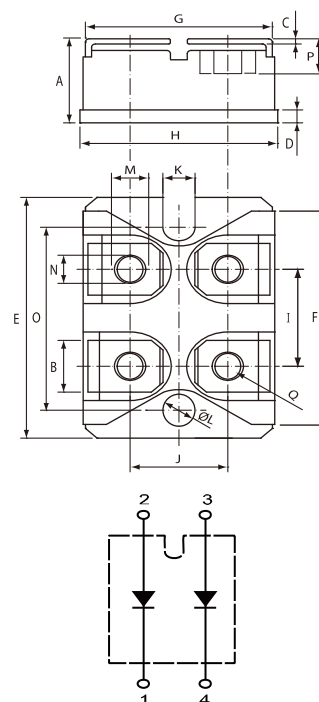
Electrical Characteristics @ 25 °C Unless Otherwise Specified.

| Characteristic | Unit | Ratings | Test Conditions |
|---|-----------------|---------------------------|-------------------------------------|
| Average Forward Current | $I_{F(AV)}$ | 120A | $T_c = 100\text{ }^{\circ}\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 2100A | 8.3ms, half sine |
| Isolation Voltage | V_{iso} | 2500V | A.C. 1 minute |
| Maximum Thermal Resistance Junction To Case | $R_{\theta jc}$ | 0.38 $^{\circ}\text{C/W}$ | |

| Characteristic | Unit | Typ. | Max. | Test Conditions |
|---|----------|------|-----------------|---|
| Maximum Instantaneous Forward Voltage* | V_F | 1.0V | 1.125V 0.95V | $I_{FM} = 120A; T_J = 25^{\circ}\text{C}$ $I_{FM} = 120A; T_J = 150^{\circ}\text{C}$ |
| Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage* | I_R | | 25uA 3mA | $T_J = 25^{\circ}\text{C}$ $T_J = 150^{\circ}\text{C}$ |
| Maximum Reverse Recovery Time | T_{rr} | | 100ns | $I_F = 0.5A, I_R = 1.0A$ $I_{RR} = 0.25A$ |

* Pulse Test: Pulse Width 300 μ sec, Duty < 2%

SOT-227



MURI 2X121 - xxA

| DIM | INCHES | | MM | |
|-----|--------|-------|-------|-------|
| | MIN | MAX | MIN | MAX |
| A | .500 | .535 | 12.70 | 13.60 |
| B | .307 | .322 | 7.80 | 8.20 |
| C | .029 | .033 | .75 | .84 |
| D | .073 | .082 | 1.85 | 2.10 |
| E | 1.487 | 1.502 | 37.80 | 38.20 |
| F | 1.250 | 1.258 | 31.75 | 32.00 |
| G | .931 | .956 | 23.65 | 24.30 |
| H | .996 | 1.007 | 25.30 | 25.60 |
| I | .586 | .594 | 14.90 | 15.10 |
| J | .492 | .516 | 12.50 | 13.10 |
| K | .161 | .169 | 4.10 | 4.30 |
| L | .161 | .169 | 4.10 | 4.30 |
| M | .181 | .191 | 4.60 | 4.95 |
| N | .165 | .177 | 4.20 | 4.50 |
| O | 1.184 | 1.192 | 30.10 | 30.30 |
| P | .217 | .244 | 5.50 | 6.20 |
| Q | M4*8 | | | |



Figure.1 - Typical Forward Characteristics

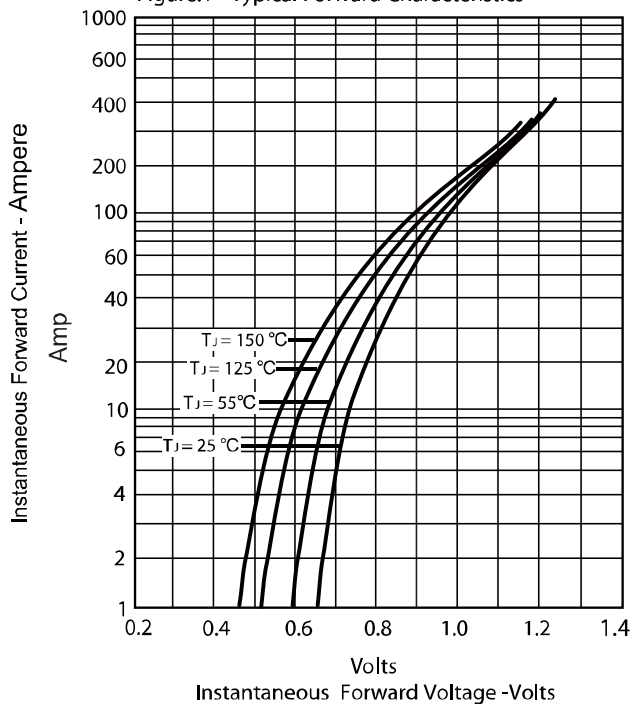


Figure.2 - Forward Derating Curve

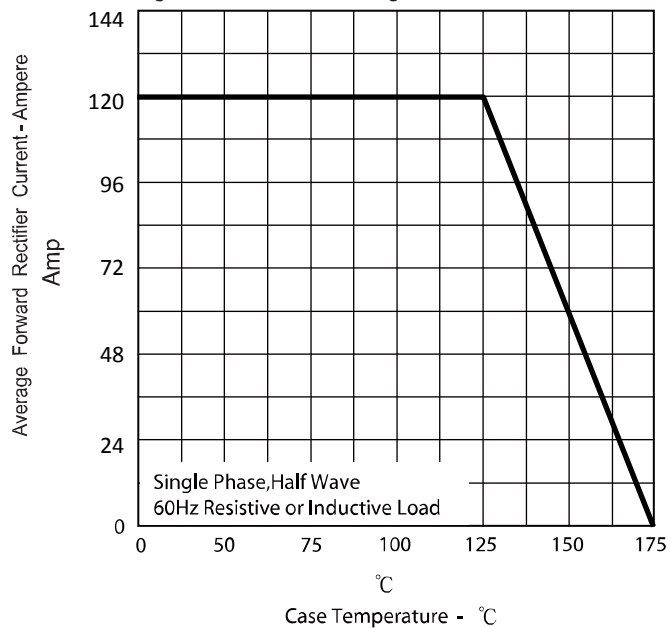


Figure.3 - Peak Forward Sur g Current

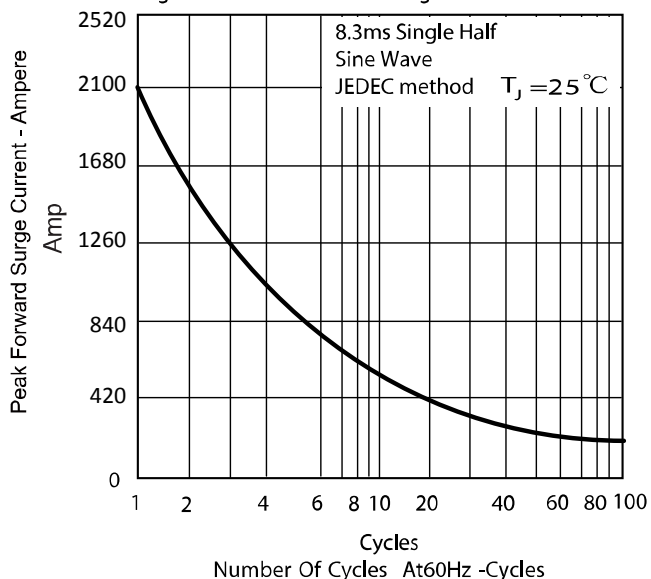
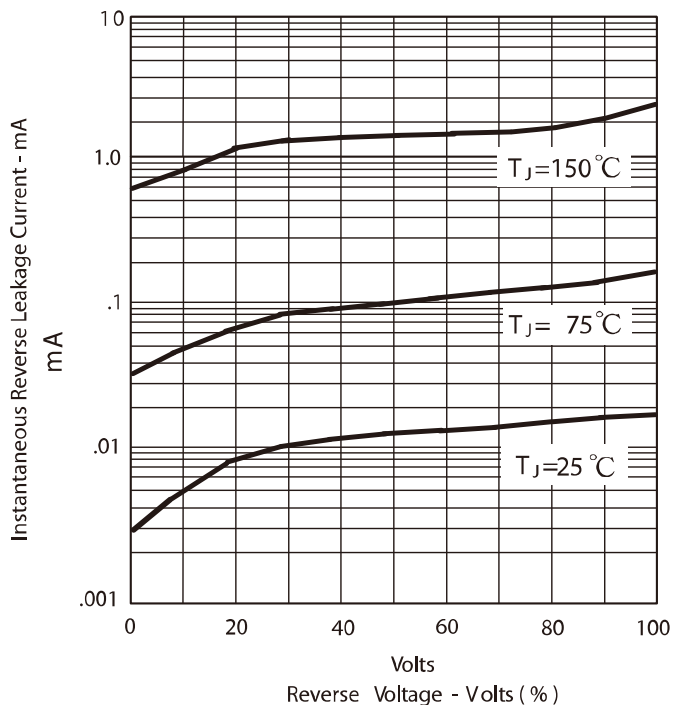
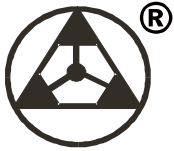


Figure .4 -Typical Reverse Characteristics





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