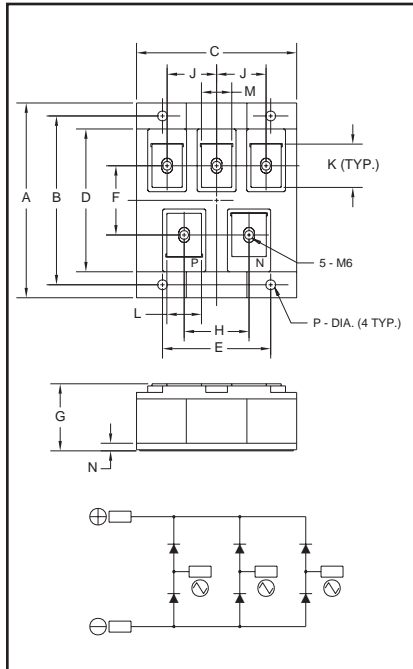


**Three-Phase
Diode Bridge Modules**
150 Amperes/1200-1600 Volts



Outline Drawing

| Dimension | Inches | Millimeters |
|-----------|--------------------------------|-------------|
| A | 3.54 | 90.0 |
| B | 3.07 | 78.0 |
| C | 2.91 | 74.0 |
| D | 2.60 | 66.0 |
| E | 1.97 | 50.0 |
| F | 1.26 | 32.0 |
| G | 1.22 | 31.0 |
| H | 1.18 | 30.0 |
| J | 0.90 | 23.0 |
| K | 0.79 | 20.0 |
| L | 0.63 | 16.0 |
| M | 0.55 | 14.0 |
| N | .26 | 6.5 |
| P | 0.177±0.004 Dia. Dia. 4.50±0.1 | |



ME601215, ME601615
Three-Phase Diode Bridge Modules
150 Amperes/1200-1600 Volts

Description:

Powerex Three-Phase Diode Bridge Modules are designed for use in three-phase bridge applications. The modules are isolated consisting of six rectifier diodes.

Features:

- Isolated Mounting
- Planar Chips

Applications:

- Inverters
- DC Power Supplies
- AC Motor Control Front End

Ordering Information:

Select the complete eight digit module part number you desire from the table below. Example: ME601215 is a 1200 Volt, 150 Ampere Three-Phase Diode Bridge Module.

| Type | Voltage Volts (x100) | Current Rating Amperes (x10) |
|------|-------------------------|---------------------------------|
| ME60 | 12 16 | 15 |



Powerex, Inc., 200 Hillis Street, Youngwood, Pennsylvania 15697-1800 (724) 925-7272

ME601215, ME601615
Three-Phase Diode Bridge Modules
150 Amperes/1200-1600 Volts

Absolute Maximum Ratings

| Characteristics | Symbol | ME601215 | ME601615 | Units |
|---|-------------|------------|------------|--------------------|
| Peak Reverse Blocking Voltage | V_{RRM} | 1200 | 1600 | Volts |
| Transient Peak Reverse Blocking Voltage (Non-Repetitive), $t < 5ms$ | V_{RSM} | 1350 | 1700 | Volts |
| DC Reverse Blocking Voltage | $V_{R(DC)}$ | 960 | 1280 | Volts |
| DC Output Current, $T_C = 97^\circ C$ | I_O | 150 | 150 | Amperes |
| Peak One-Cycle Surge (Non-Repetitive) On-State Current (60Hz) | I_{FSM} | 1500 | 1500 | Amperes |
| Peak One-Cycle Surge (Non-Repetitive) On-State Current (50Hz) | I_{FSM} | 1365 | 1365 | Amperes |
| I^2t (for Fusing), 8.3 milliseconds | I^2t | 9400 | 9400 | A ² sec |
| Storage Temperature | T_{STG} | -40 to 125 | -40 to 125 | °C |
| Operating Temperature | T_j | -40 to 150 | -40 to 150 | °C |
| Maximum Mounting Torque M4 Mounting Screw | — | 12 | 12 | in.-lb. |
| Maximum Mounting Torque M4 Terminal Screw | — | 12 | 12 | in.-lb. |
| Module Weight (Typical) | — | 405 | 405 | Grams |
| V Isolation | V_{RMS} | 2500 | 2500 | Volts |



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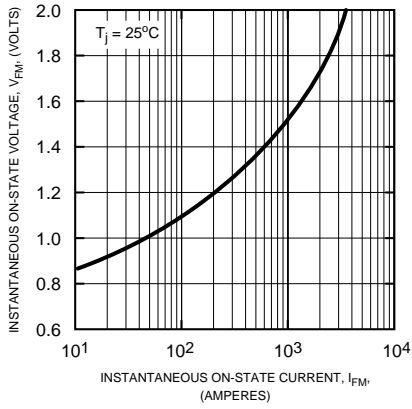
ME601215, ME601615
Three-Phase Diode Bridge Modules
150 Amperes/1200-1600 Volts

Electrical and Thermal Characteristics, $T_j = 25^\circ\text{C}$ unless otherwise specified

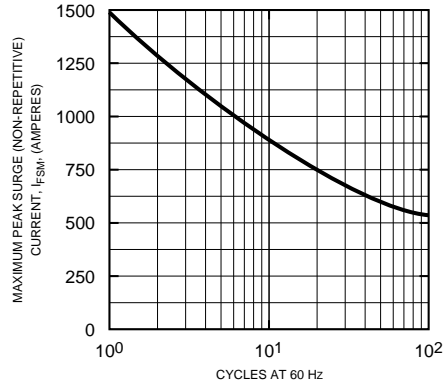
| Characteristics | Symbol | Test Conditions | ME601215/ME601615 | Units |
|---|-------------------|--|-------------------|------------------------------|
| Blocking State Maximums | | | | |
| Reverse Leakage Current, Peak | I_{RRM} | $T_j = 150^\circ\text{C}$, $V_{RRM} = \text{Rated}$ | 15 | mA |
| Conducting State Maximums | | | | |
| Peak On-State Voltage | V_{FM} | $I_{FM} = 150\text{A}$ | 1.35 | Volts |
| Thermal Maximums | | | | |
| Thermal Resistance, Junction-to-Case | $R_{\theta(J-C)}$ | Per Module | 0.15 | $^\circ\text{C}/\text{Watt}$ |
| Thermal Resistance, Case-to-Sink (Lubricated) | $R_{\theta(C-S)}$ | Per Module | 0.04 | $^\circ\text{C}/\text{Watt}$ |

ME601215, ME601615
Three-Phase Diode Bridge Modules
 150 Amperes/1200-1600 Volts

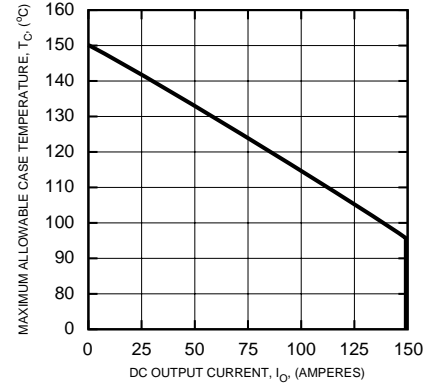
MAXIMUM ON-STATE CHARACTERISTICS



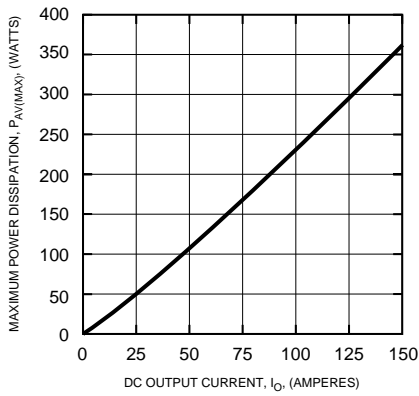
MAXIMUM ALLOWABLE PEAK SURGE (NON-REPETITIVE) CURRENT



MAXIMUM ALLOWABLE CASE TEMPERATURE



MAXIMUM ON-STATE POWER DISSIPATION



TRANSIENT THERMAL IMPEDANCE CHARACTERISTICS (JUNCTION-TO-CASE)

