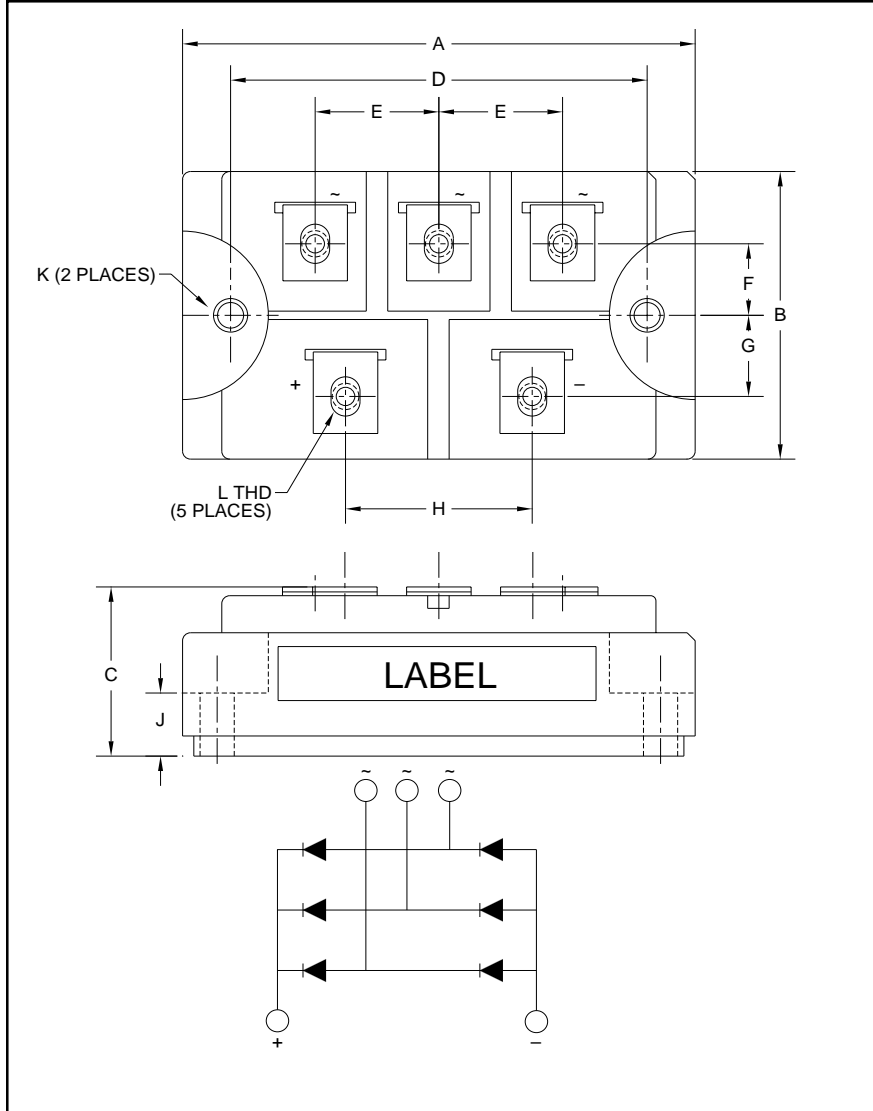


### Three-Phase Diode Bridge Module 150 Amperes / 800-1600 Volts



Outline Drawing and Circuit Diagram

Dimensions	Inches	Millimeters
A	3.15	80.0
B	1.58	40.0
C	0.95 +0.06/+0.02	24.1 +1.5/-0.5
D	2.68±0.01	68.0±0.25
E	0.79	20.0
F	0.41	10.5
G	0.45	11.5
H	1.18	30.0
J	0.32	8.0
K	0.217	5.5
L	M5	M5



#### Description:

Powerex Three-Phase Diode Bridge Modules are designed for use in applications requiring rectification of three-phase AC lines into DC voltage. Each module consists of six diodes and the interconnect required to form a complete three-phase bridge circuit. Each diode is electrically insulated from the mounting base plate for easy mounting on a common heatsink with other components.

#### Features:

- Isolated Mounting
- Metal Base Plate
- Low Thermal Impedance

#### Applications:

- Motor Control
- Inverters
- UPS

#### Ordering Information:

Example: Select the complete module number you desire from the table - i.e. RM75TPM-H is a 800V ( $V_{CES}$ ), 150 Ampere Three-Phase Diode Bridge Module.

Type	Current Rating Amperes	$V_{CES}$ Volts
-H	150	800
-24	150	1200
-2H	150	1600



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

**RM75TPM-H / -24 / -2H**  
**Three-Phase Diode Bridge Module**  
 150 Amperes / 800-1600 Volts

**Absolute Maximum Ratings,  $T_j = 25^\circ\text{C}$  unless otherwise specified**

Characteristics	Symbol	RM75TPM			Units
		-H	-24	-2H	
Repetitive Peak Reverse Voltage	$V_{RRM}$	800	1200	1600	Volts
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$	960	1350	1700	Volts
Recommended AC Input Voltage	$E_A$	220	370	440	Volts
DC Output Current (Three-Phase Full Wave Rectifying Circuit)	$I_{DC}$	150	150	150	Amperes
		( $T_C=99^\circ\text{C}$ ) ( $T_C=85^\circ\text{C}$ ) ( $T_C=85^\circ\text{C}$ )			
Surge (Non-Repetitive) Forward Current (One Half Cycle at 60Hz, Peak Value)	$I_{FSM}$		1500		Amperes
$I^2t$ for Fusing (Value for One Cycle of Surge Current)	$I^2t$		9400		$\text{A}^2\text{sec}$
Junction Temperature	$T_j$		-40 ~ +150		$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-40 ~ +125		$^\circ\text{C}$
Maximum Mounting Torque M5 Mounting Screw	-		17		in-lb
Maximum Mounting Torque M5 Terminal Screw	-		17		in-lb
Weight	-		200		Grams
Dielectric Strength (AC 60Hz, 1 minute between terminal and base plate)	$V_{iso}$		2500		Volts

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

Characteristics	Symbol	Test Conditions	Min.	Typ.	Max.	Units
Repetitive Reverse Current	$I_{RRM}$	$T_j = 150^\circ\text{C}$ , $V_{RM} = V_{RRM}$ , $V_{RRM}$ Applied	-	-	15	mA
Forward Voltage Drop	$V_{FM}$	$T_j = 25^\circ\text{C}$ , $I_{FM} = 150\text{A}$ , $tw \leq 1\text{ms}$	-	-	1.3	Volts
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	0.2	$^\circ\text{C/W}$
Thermal Resistance	$R_{th(c-f)}$	Case to Fin, Conductive Grease Applied	-	-	0.06	$^\circ\text{C/W}$
Isolation Resistance (-24, -2H)		Measured with a 500V Megohmmeter Between Main Terminal and Case	10	-	-	$\text{M}\Omega$

