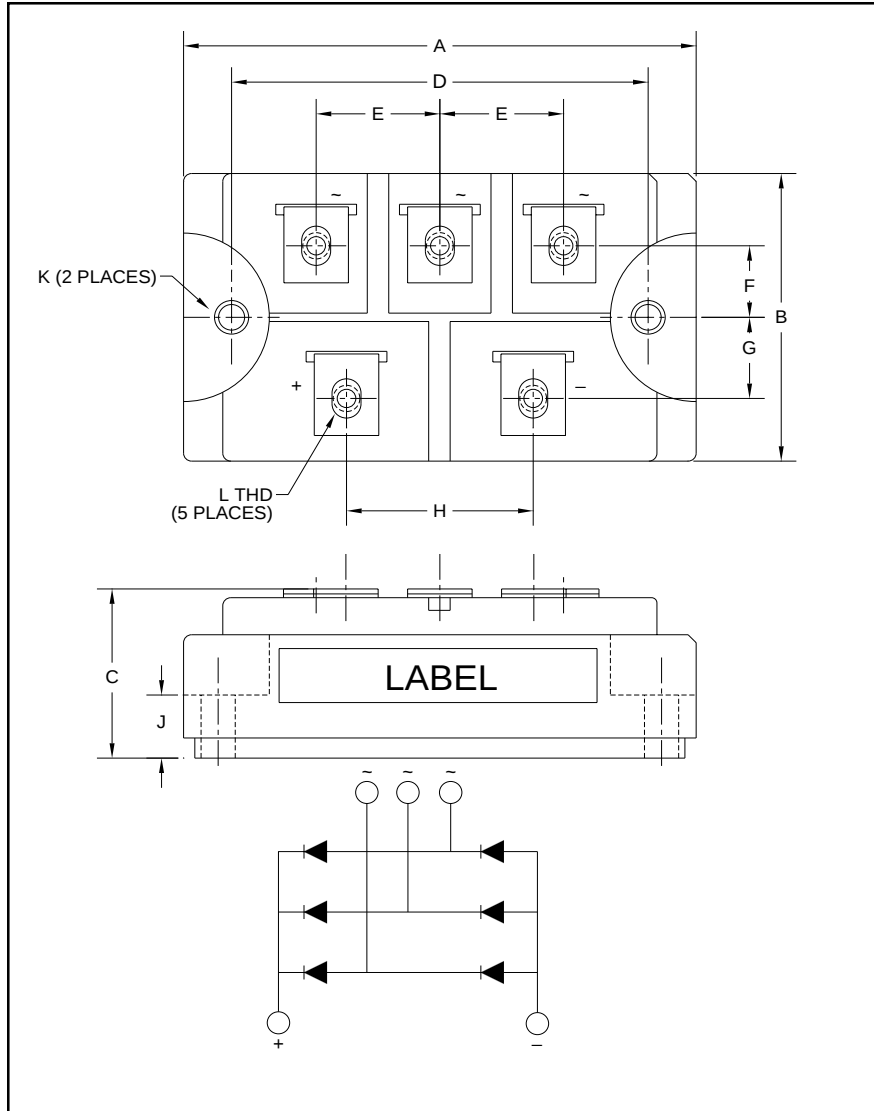


Three-Phase Diode Bridge Module 150 Amperes / 800-1600 Volts



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		A^2sec
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	—	—	$\text{M}\Omega$

