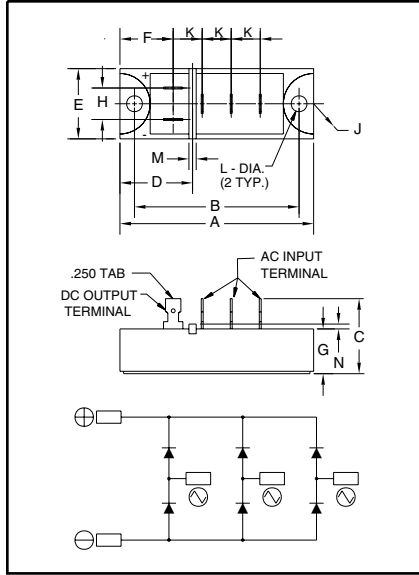


Three-Phase Diode Bridge Modules 30 Amperes/800 Volts



Outline Drawing

Dimension	Inches	Millimeters
A	3.150	80
B	2.677±0.012	68±0.3
C	1.220	31
D	1.181	30
E	1.142	29
F	0.866	22
G	0.728	18.5
H	0.512	13
J	0.492 R	R12.5
K	0.472	12
L	0.256±0.008 Dia.	Dia. 6.5±0.2
M	0.118	3
N	0.079	2



ME700803
Three-Phase Diode Bridge Modules
30 Amperes/800 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. These ME70 Modules have been tested and recognized by Underwriters Laboratories (QQX2 Power Switching Semiconductors).

Features:

- Isolated Mounting
- Planar Chips
- UL Recognized

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: ME700803 is an 800 Volt, 30 Ampere Three-Phase Diode Bridge Module.

Type	Voltage Volts (x100)	Current Rating Amperes (x10)
ME70	08	03

ME700803

Three-Phase Diode Bridge Modules

30 Amperes/800 Volts

Absolute Maximum Ratings

Characteristics	Symbol	ME700803	Units
Peak Reverse Blocking Voltage	V_{RRM}	800	Volts
Transient Peak Reverse Blocking Voltage (Non-Repetitive), $t < 5\text{ms}$	V_{RSM}	900	Volts
DC Reverse Blocking Voltage	$V_{R(DC)}$	640	Volts
DC Output Current, $T_C = 103^\circ\text{C}$	I_O	30	Amperes
Peak One-Cycle Surge (Non-Repetitive) On-State Current (60Hz)	I_{FSM}	400	Amperes
Peak One-Cycle Surge (Non-Repetitive) On-State Current (50Hz)	I_{FSM}	365	Amperes
I^2t (for Fusing), 8.3 milliseconds	I^2t	667	A^2sec
Storage Temperature	T_{STG}	-40 to 125	$^\circ\text{C}$
Operating Temperature	T_j	-40 to 150	$^\circ\text{C}$
Maximum Mounting Torque M6 Mounting Screw	—	26	in.-lb.
Module Weight (Typical)	—	120	Grams
V Isolation	V_{RMS}	2000	Volts

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

Characteristics	Symbol	Test Conditions	ME700803	Units
Blocking State Maximums				
Reverse Leakage Current, Peak	I_{RRM}	$T_j = 150^\circ\text{C}$, $V_{RRM} = \text{Rated}$	1.5	mA
Conducting State Maximums				
Peak On-State Voltage	V_{FM}	$I_{FM} = 30\text{A}$	1.1	Volts
Thermal Maximums				
Thermal Resistance, Junction-to-Case	$R_{\theta(J-C)}$	Per Module	0.7	$^\circ\text{C}/\text{Watt}$
Thermal Resistance, Case-to-Sink (Lubricated)	$R_{\theta(C-S)}$	Per Module	0.1	$^\circ\text{C}/\text{Watt}$

