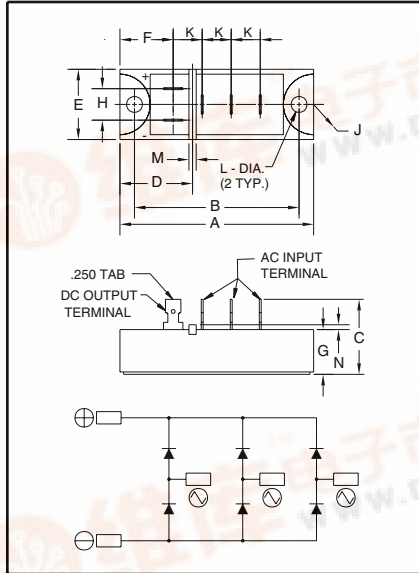


ME700803

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

**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 (QQQX2 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



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

**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), $t < 5ms$	$V_{RSM}$	900	Volts
DC Reverse Blocking Voltage	$V_{R(DC)}$	640	Volts
DC Output Current, $T_C = 103^\circ C$	$I_O$	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 <sup>2</sup> sec
Storage Temperature	$T_{STG}$	-40 to 125	$^\circ C$
Operating Temperature	$T_j$	-40 to 150	$^\circ C$
Maximum Mounting Torque M6 Mounting Screw	—	26	in.-lb.
Module Weight (Typical)	—	120	Grams
V Isolation	$V_{RMS}$	2000	Volts

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

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

