



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

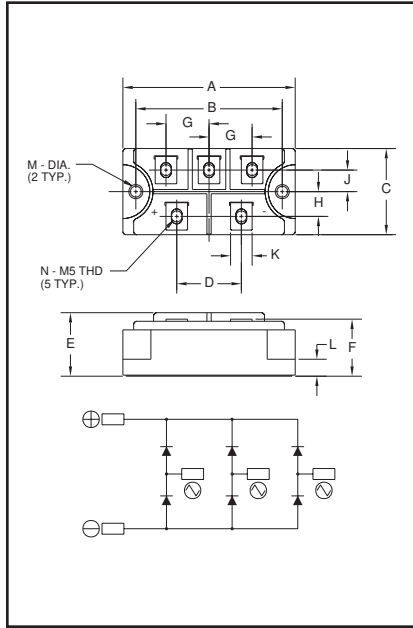
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**Three-Phase**  
**Diode Bridge Modules**  
**100 Amperes/1200-1600 Volts**



**Outline Drawing**

Dimension	Inches	Millimeters
A	3.15	80
B	2.677±0.010	68±0.25
C	1.57	40
D	1.18	30
E	1.16	29.5
F	1.04	26.5
G	0.79	20
H	0.45	11.5
J	0.41	10.5
K	0.39	10
L	0.31	8
M	0.216 Dia.	Dia. 5.5
N	M5 Metric	M5



**ME501210, ME501610**  
**Three-Phase Diode Bridge Modules**  
100 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: ME501210 is a 1200 Volt, 100 Ampere Three-Phase Diode Bridge Module.

Type	Voltage Volts (x100)	Current Rating Amperes (x10)
ME50	12 16	10



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

**ME501210, ME501610**  
**Three-Phase Diode Bridge Modules**  
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### Absolute Maximum Ratings

Characteristics	Symbol	ME501210	ME501610	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, $T_C = 102^\circ C$	$I_O$	100	100	Amperes
Peak One-Cycle Surge (Non-Repetitive) On-State Current (60Hz)	$I_{FSM}$	1000	1000	Amperes
Peak One-Cycle Surge (Non-Repetitive) On-State Current (50Hz)	$I_{FSM}$	910	910	Amperes
$I^2t$ (for Fusing), 8.3 milliseconds	$I^2t$	4200	4200	$A^2sec$
Storage Temperature	$T_{STG}$	-40 to 125	-40 to 125	$^\circ C$
Operating Temperature	$T_j$	-40 to 150	-40 to 150	$^\circ C$
Maximum Mounting Torque M5 Mounting Screw	—	17	17	in.-lb.
Maximum Mounting Torque M5 Terminal Screw	—	17	17	in.-lb.
Module Weight (Typical)	—	220	220	Grams
V Isolation	$V_{RMS}$	2500	2500	Volts



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

Characteristics	Symbol	Test Conditions	ME501210/ME501610	Units
<b>Blocking State Maximums</b>				
Reverse Leakage Current, Peak	$I_{RRM}$	$T_j = 150^\circ\text{C}$ , $V_{RRM} = \text{Rated}$	10	mA
<b>Conducting State Maximums</b>				
Peak On-State Voltage	$V_{FM}$	$I_{FM} = 100\text{A}$	1.2	Volts
<b>Thermal Maximums</b>				
Thermal Resistance, Junction-to-Case	$R_{\theta(J-C)}$	Per Module	0.2	$^\circ\text{C/Watt}$
Thermal Resistance, Case-to-Sink (Lubricated)	$R_{\theta(C-S)}$	Per Module	0.06	$^\circ\text{C/Watt}$

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