



E502650

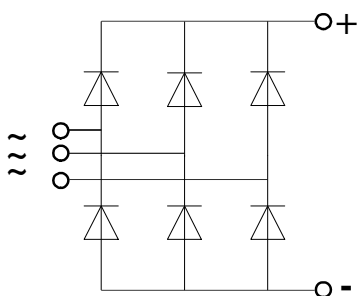
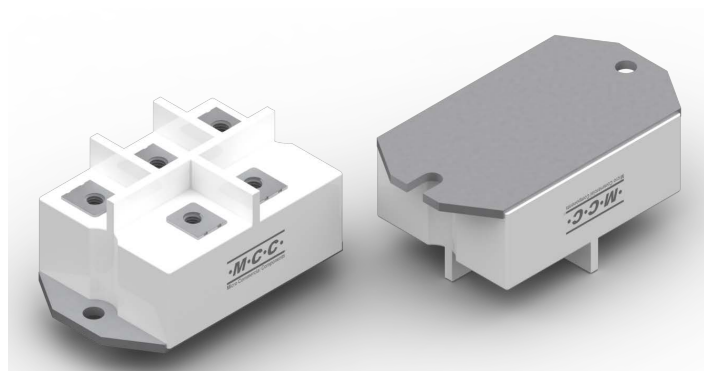
## Features

- Heat Transfer Through Aluminum Oxide DBC Ceramic Isolated Metal Baseplate
- Blocking Voltage: 1600 V
- Glass Passivated Chip
- Three Phase Bridge Rectifier

## Applications

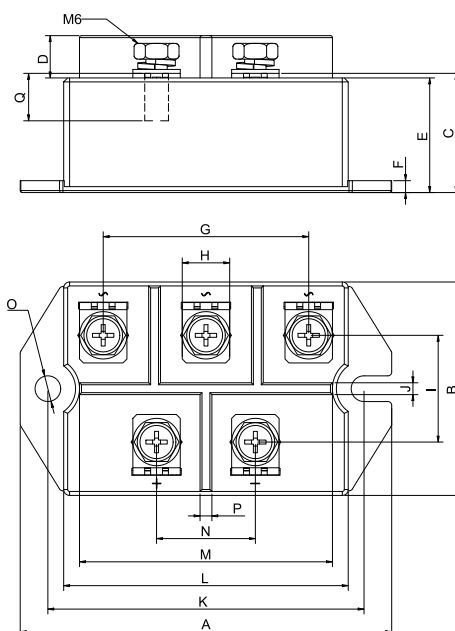
- Three Phase Rectifiers for Power Supplies
- Rectifiers for DC Motor Field Supplies
- Battery Charger Rectifiers
- Input Rectifiers for Variable Frequency Drives

MCC Part Number	$V_{RRM}$	$V_{RSM}$
MD200S16NM3	1600V	1700V



# 200 Amp Glass Passivated Three Phase Rectifier Bridge 1600 Volts

NM3



## DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	3.681	3.720	93.50	94.50	
B	2.106	2.146	53.50	54.50	
C	1.161	1.201	29.50	30.50	
D	0.402	0.441	10.20	11.20	
E	1.122	1.161	28.50	29.50	
F	0.114	0.122	2.90	3.10	
G	2.028	2.067	51.50	52.50	
H	0.453	0.492	11.50	12.50	
I	1.043	1.083	26.50	27.50	
J	0.110	0.126	2.80	3.20	
K	3.130	3.169	79.50	80.50	
L	2.815	2.854	71.50	72.50	
M	2.500	2.539	63.50	64.50	
N	0.965	1.004	24.50	25.50	
O	0.244	0.268	6.20	6.80	Φ
P	0.098	0.138	2.50	3.50	
Q	0.453	0.492	11.50	12.50	

## Maximum Ratings

Symbol	Conditions	Values	Units
$I_D$	Three Phase, Full Wave $T_c=100^{\circ}\text{C}$	200	A
$I_{FSM}$	$t=10\text{mS}$ $T_{vj}=45^{\circ}\text{C}$	2240	A
$i^2t$	$t=10\text{mS}$ $T_{vj}=45^{\circ}\text{C}$	25000	$\text{A}^2\text{s}$
$V_{isol}$	a.c.50HZ;r.m.s.;1min	3000	V
$T_{vj}$		-40 to +150	$^{\circ}\text{C}$
$T_{stg}$		-40 to +125	$^{\circ}\text{C}$
Mt	to Terminals(M6)	$5\pm 15\%$	Nm
Ms	to Heat Sink(M6)	$5\pm 15\%$	Nm
Weight	Module (Approximately)	230	g

## Thermal Characteristics

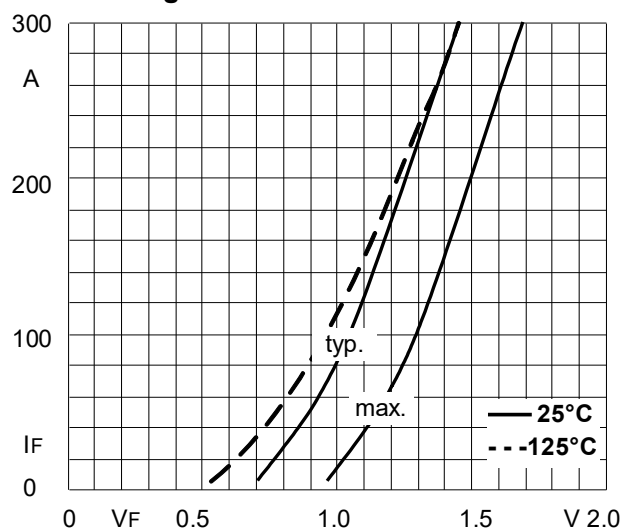
Symbol	Conditions	Values	Units
$R_{th(j-c)}$	Per Diode	0.45	$^{\circ}\text{C/W}$
$R_{th(c-s)}$	Module (Approximately)	0.025	$^{\circ}\text{C/W}$

## Electrical Characteristics

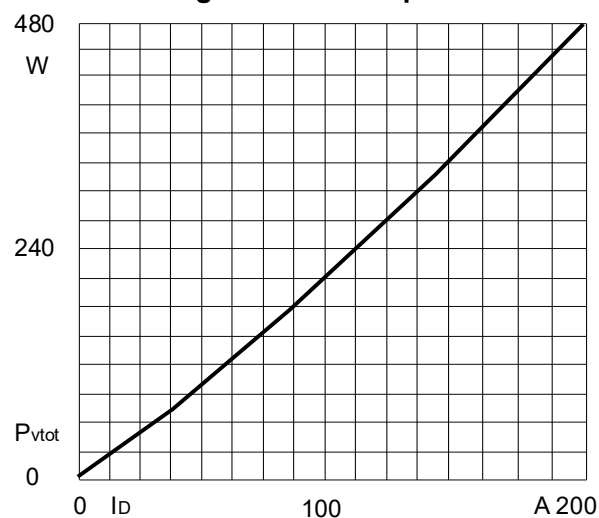
Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
$V_{FM}$	$T_{vj}=25^{\circ}\text{C}$ ; $I_F=300\text{A}$	—	1.45	1.70	V
$I_{RD}$	$T_{vj}=25^{\circ}\text{C}$ ; $V_{RD}=V_{RRM}$ $T_{vj}=150^{\circ}\text{C}$ ; $V_{RD}=V_{RRM}$	—	—	0.5 6	mA mA

## Performance Curves

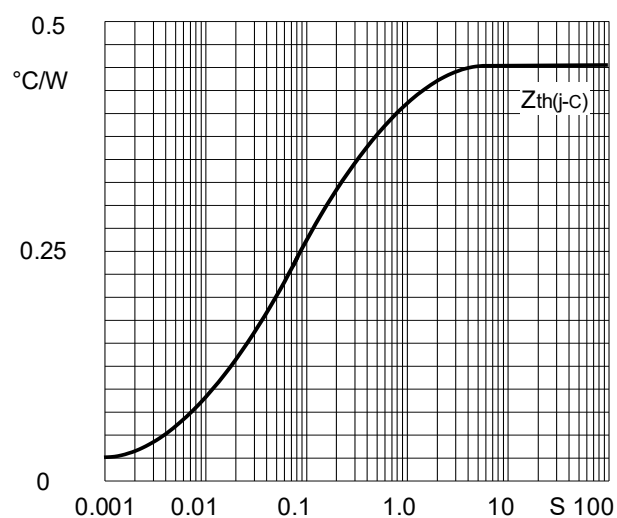
**Fig1. Forward Characteristics**



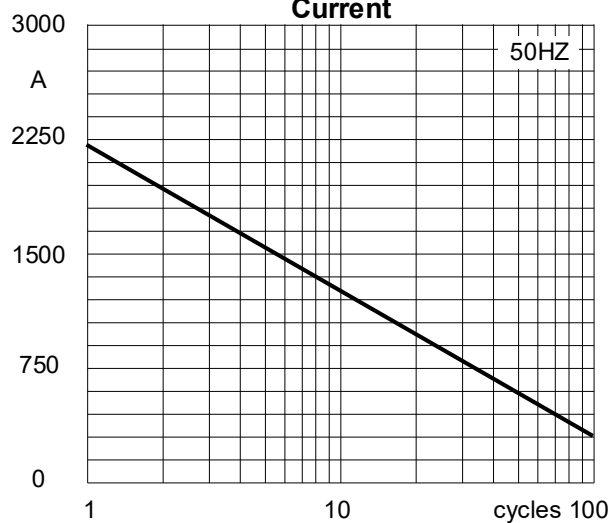
**Fig2. Power Dissipation**



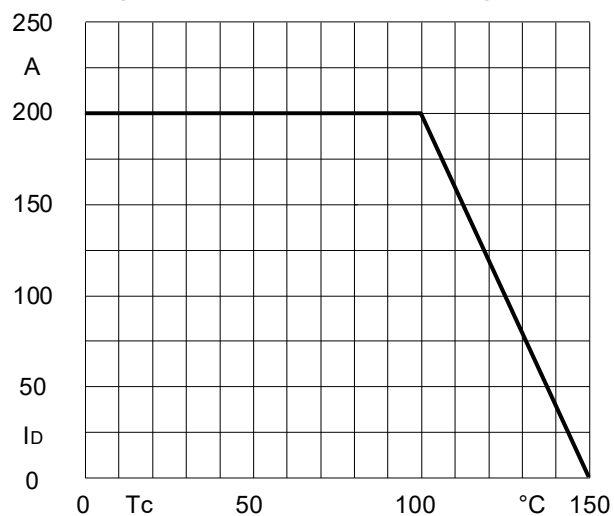
**Fig3. Transient Thermal Impedance**



**Fig4. Max Non-Repetitive Forward Surge Current**



**Fig5. Forward Current Derating Curve**



## Ordering Information

Device	Packing
Part Number-BP	Bulk: 6pcs/Box ;60pcs/Ctn

### \*\*\*IMPORTANT NOTICE\*\*\*

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages.

### \*\*\*LIFE SUPPORT\*\*\*

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

### \*\*\*CUSTOMER AWARENESS\*\*\*

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Micro Commercial Components \(MCC\):](#)

[MD200S16NM3-BP](#)