

Micro Commercial Components



Micro Commercial Components 130 W Cochran St, Unit B Simi Valley, CA 93065 USA Tel:818-701-4933

Features

- Lead Free Finish/RoHS Compliant (NOTE 1)("P" Suffix designates RoHS Compliant. See ordering information)
- Blocking Voltage:800 to 1800V
- Heat transfer through aluminum oxide DBC ceramic isolated metal baseplate
- Glass passivated chip

Applications

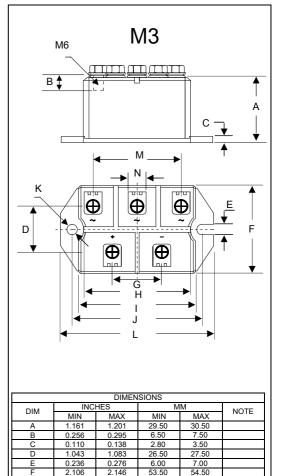
- Three phase rectifiers for power supplies
- Rectifiers for DC motor field supplies
- Input rectifiers for variable frequency drives



Circuit			
~ ~ ~			
~			

MD200S08M3 MD200S12M3 MD200S16M3 MD200S18M3 MD200S20M3

200 Amp GLASS PASSIVATED THREE PHASE RECTIFIER BRIDGE 800~2000 Volts



24.50

65.50 71.50

79.50

93.5

11.50

25.50

66.50 72.50

80.50

94.50

12.50

1.004

2.618

2.854

3.169

2.06

0 4 9 2

0.96

2 579

2.81

3.130

3.68

0 453

н

www.mccsemi	.com -

Φ



Micro Commercial Components

Module Type

ТҮРЕ	Vrrm	Vrsm
MD200S08M3	800V	900V
MD200S12M3	1200V	1300V
MD200S16M3	1600V	1700V
MD200S18M3	1800V	1900V
MD200S20M3	2000V	2100V

Maximum Ratings

Symbol	Conditions	Values	Units
ID	Three phase, full wave Tc=100 $^\circ\!\!\mathbb{C}$	200	А
IFSM	t=10mS Tvj =45℃	2240	А
i ² t	t=10mS Tvj =45℃	25000	A ² s
Visol	a.c.50HZ;r.m.s.;1min	3000	V
Tvj		-40 to +150	°C
Tstg		-40 to +125	°C
Mt	To terminals(M6)	5±15%	Nm
Ms	To heatsink(M6)	5±15%	Nm
Weight	Module (Approximately)	230	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	0.45	°C/W
Rth(c-s)	Module(Approximately)	0.025	°C/W

Electrical Characteristics

Symbol	Conditions	Values			Units
Symbol		Min.	Тур.	Max.	Units
Vfm	T=25℃ IF =300A		1.45	1.70	V
Ird	Tvj=25℃ VRD=VRRM Tvj=150℃ VRD=VRRM		_	0.5 6	mA mA

www.mccsemi.com



Micro Commercial Components

Performance Curves

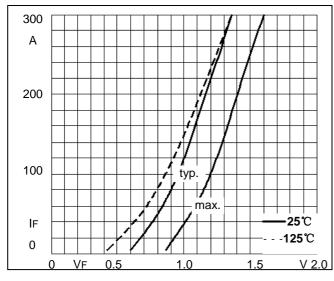


Fig1. Forward Characteristics

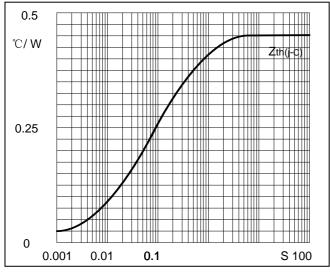


Fig3. Transient thermal impedance

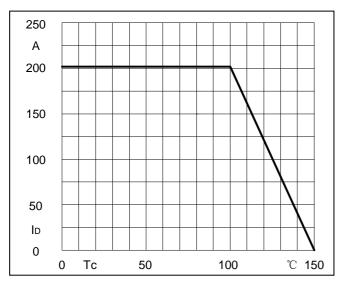


Fig5.Forward Current Derating Curve

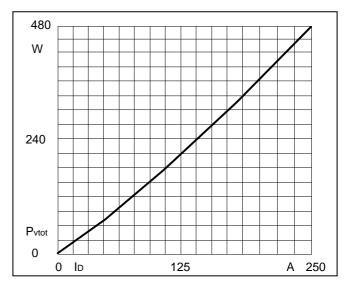


Fig2. Power dissipation

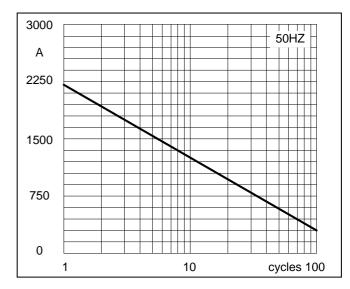


Fig4. Max Non-Repetitive Forward Surge Current

www.mccsemi.com

Revision: B



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. *Micro Commercial Components Corp*. products are sold subject to the general terms and conditions of commercial sale, as published at

https://www.mccsemi.com/Home/TermsAndConditions.

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.

www.mccsemi.com