



Micro Commercial Components



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MD200S08M5
MD200S12M5
MD200S16M5
MD200S18M5

Features

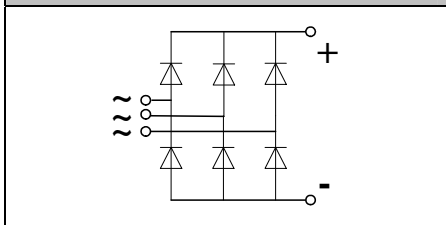
- Lead Free Finish/RoHS Compliant (NOTE 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Blocking Voltage: 800 to 1800V
- Heat transfer through aluminum oxide DBC ceramic isolated metal baseplate
- Glass passivated chip

Applications

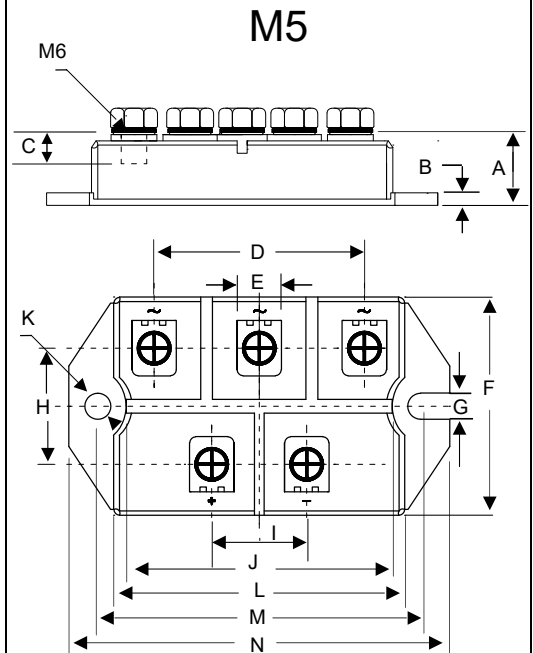
- Three phase rectifiers for power supplies
- Rectifiers for DC motor field supplies
- Battery charger rectifiers



Circuit



200 Amp
GLASS PASSIVATED
THREE PHASE
RECTIFIER BRIDGE
800~1800 Volts



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.657	.681	16.70	17.30	
B	.106	.130	2.70	3.30	
C	.264	.287	6.70	7.30	
D	2.04	2.06	51.70	52.30	
E	.461	.484	11.70	12.30	
F	2.11	2.14	53.70	54.30	
G	.244	.268	6.20	6.80	
H	1.05	1.07	26.70	27.30	
I	.972	.996	24.70	25.30	
J	2.59	2.61	65.70	66.30	
K		.256		6.50	∅
L	2.82	2.85	71.70	72.30	
M	3.14	3.16	79.70	80.30	
N	3.69	3.71	93.70	94.30	

Module Type

TYPE	VRRM	VRSM
MD200S08M5	800V	900V
MD200S12M5	1200V	1300V
MD200S16M5	1600V	1700V
MD200S18M5	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
I _D	Three phase, full wave T _c =100°C	200	A
I _{FSM}	t=10mS T _{vj} =45°C	2240	A
i ² t	t=10mS T _{vj} =45°C	25000	A ² s
V _{isol}	a.c.50HZ;r.m.s.;1min	3000	V
T _{vj}		-40 to +150	°C
T _{stg}		-40 to +125	°C
M _t	To terminals(M6)	5±15%	Nm
M _s	To heatsink(M6)	5±15%	Nm
Weight	Module (Approximately)	194	g

Thermal Characteristics

Symbol	Conditions	Values	Units
R _{th(j-c)}	Per diode	0.45	°C/W
R _{th(c-s)}	Module (Approximately)	0.025	°C/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V _{FM}	T=25°C I _F =300A	—	1.45	1.70	V
I _{RD}	T _{vj} =25°C V _{RD} =V _{RRM}	—	—	0.5	mA
	T _{vj} =150°C V _{RD} =V _{RRM}	—	—	6	mA

Performance Curves

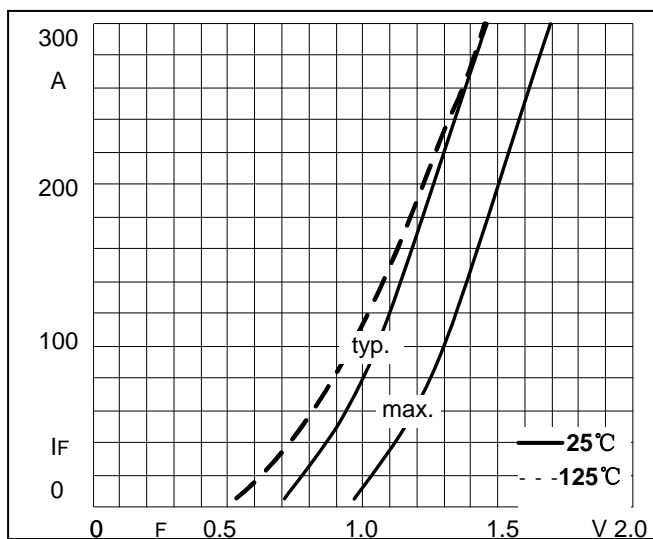


Fig1. Forward Characteristics

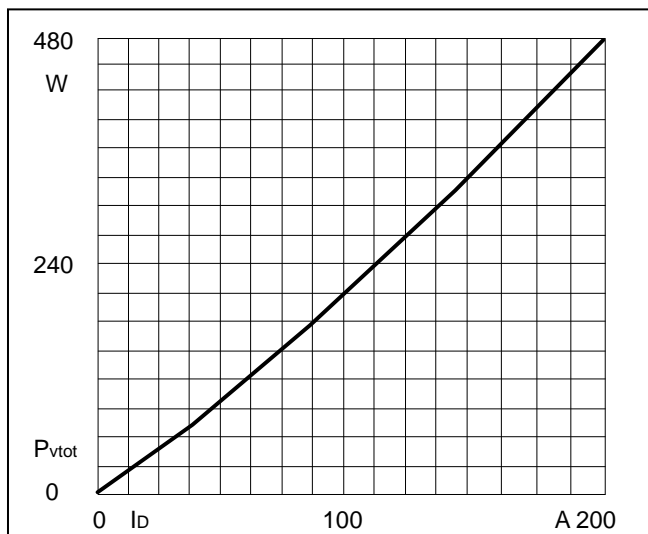


Fig2. Power dissipation

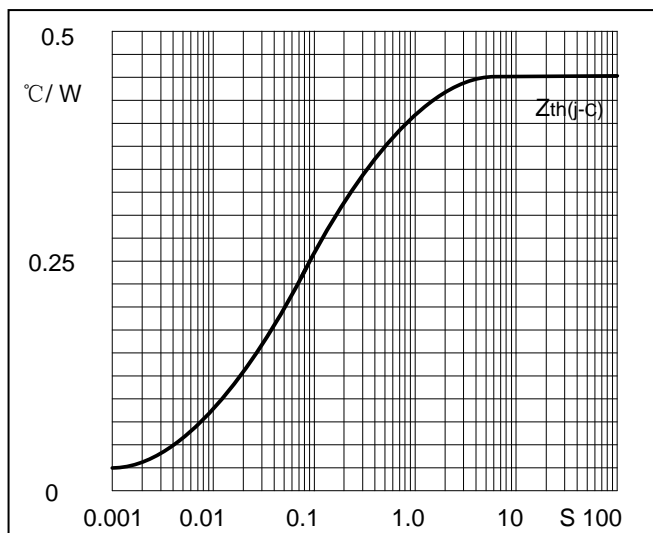


Fig3. Transient thermal impedance

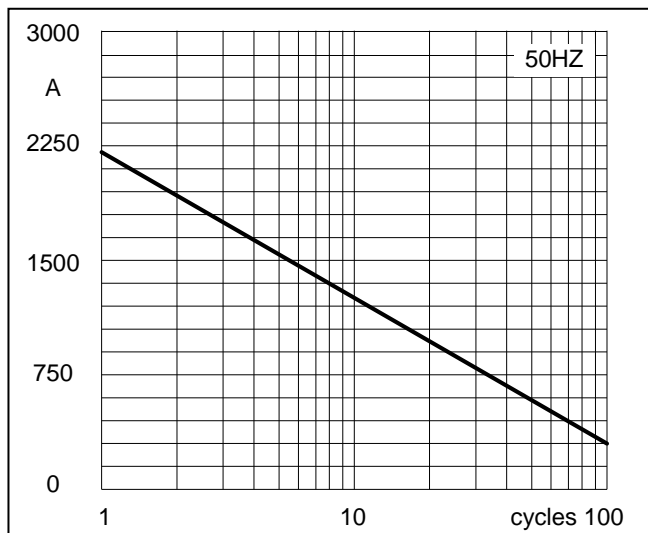


Fig4. Max Non-Repetitive Forward Surge Current

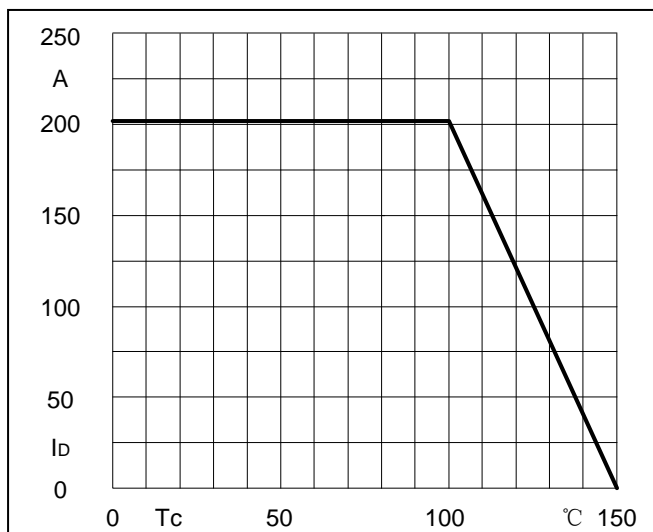


Fig5. Forward Current Derating Curve



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Ordering Information :

Device	Packing
Part Number-BP	Bulk: 6PCS/BOX ;60PCS/CTN

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