



Micro Commercial Components  
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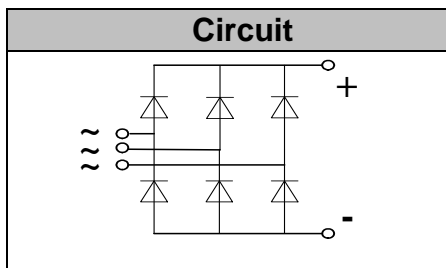
**MD100S08M2**  
**MD100S12M2**  
**MD100S16M2**  
**MD100S18M2**

## Features

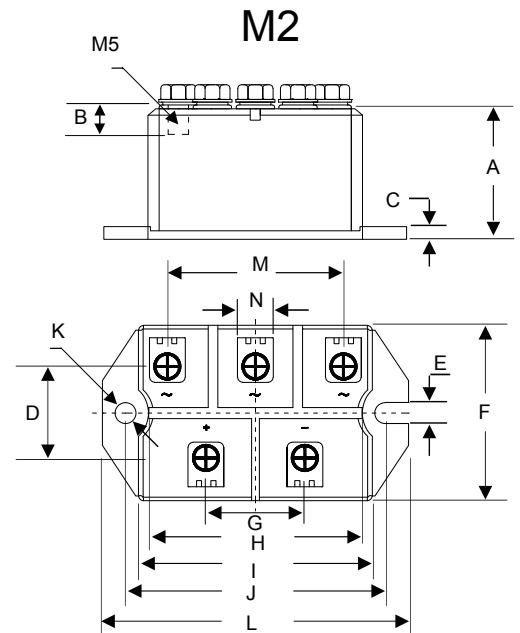
- Lead Free Finish/RoHS Compliant (NOTE 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Blocking Voltage: 800 to 1800V
- Heat transfer through aluminum oxide DBC ceramic isolated metal baseplate
- Glass passivated chip

## Applications

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



**100 Amp**  
**GLASS PASSIVATED**  
**THREE PHASE**  
**RECTIFIER BRIDGE**  
**800~1800 Volts**



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.169	1.193	29.70	30.30	
B	.264	.287	6.70	7.30	
C	.118	.130	3.00	3.30	
D	.839	.862	21.30	21.90	
E	.205	.228	5.20	5.80	
F	1.641	1.655	41.70	42.30	
G	.894	.917	22.70	23.30	
H	1.878	1.902	47.70	48.30	
I	2.114	2.138	53.70	54.30	
J	2.350	2.374	59.70	60.30	
K	.217		5.50		∅
L	2.823	2.846	71.70	72.30	
M	1.563	1.587	39.70	40.30	
N	.815	.839	8.70	9.30	

### Module Type

TYPE	VRRM	VRSM
MD100S08M2	800V	900V
MD100S12M2	1200V	1300V
MD100S16M2	1600V	1700V
MD100S18M2	1800V	1900V

### Maximum Ratings

Symbol	Conditions	Values	Units
ID	Three phase, full wave Tc=100°C	100	A
IFSM	t=10mS Tvj =45°C	920	A
i <sup>2</sup> t	t=10mS Tvj =45°C	4200	A <sup>2</sup> s
Visol	a.c.50HZ;r.m.s.;1min	3000	V
Tvj		-40 to +150	°C
Tstg		-40 to +125	°C
Mt	To terminals(M5)	5±15%	Nm
Ms	To heatsink(M5)	5±15%	Nm
Weight	Module (Approximately)	130	g

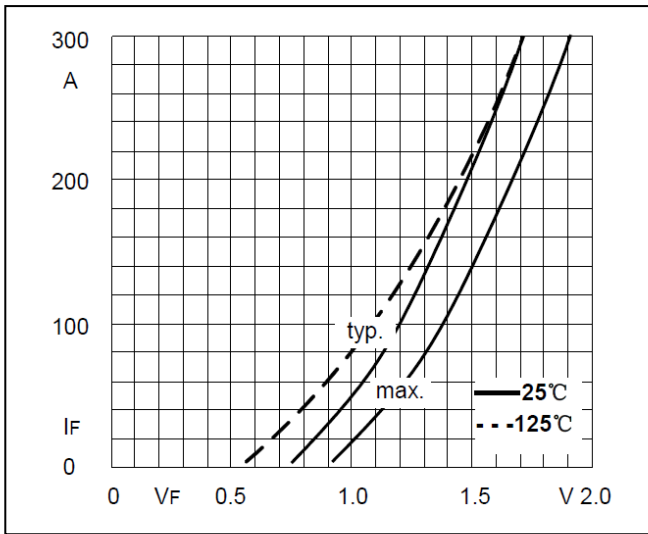
### Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	1.0	°C/W
Rth(c-s)	Module(Approximately)	0.07	°C/W

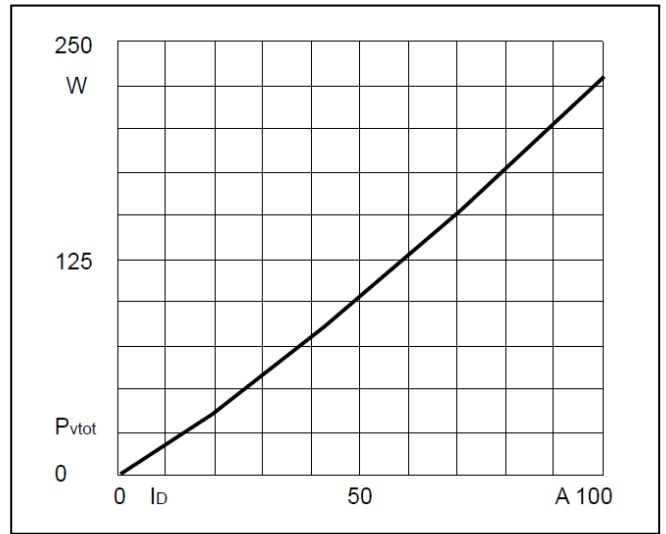
### Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
VFM	T=25°C IF =150A	—	1.70	1.90	V
IRD	Tvj=25°C VRD=VRRM	—	—	0.3	mA
	Tvj=150°C VRD=VRRM			5	

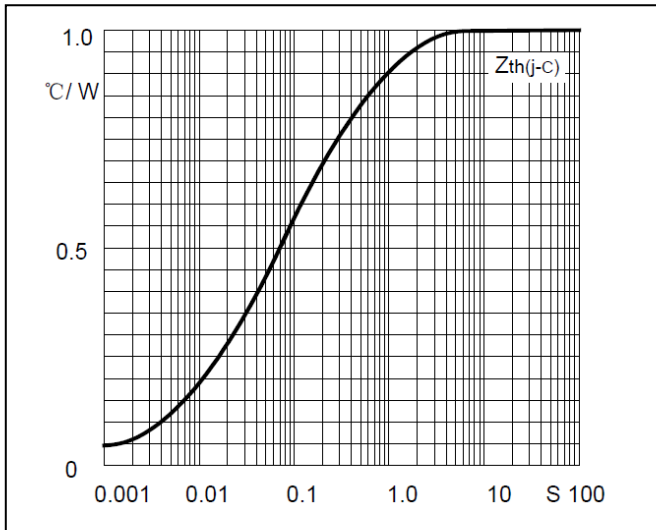
**Performance Curves**



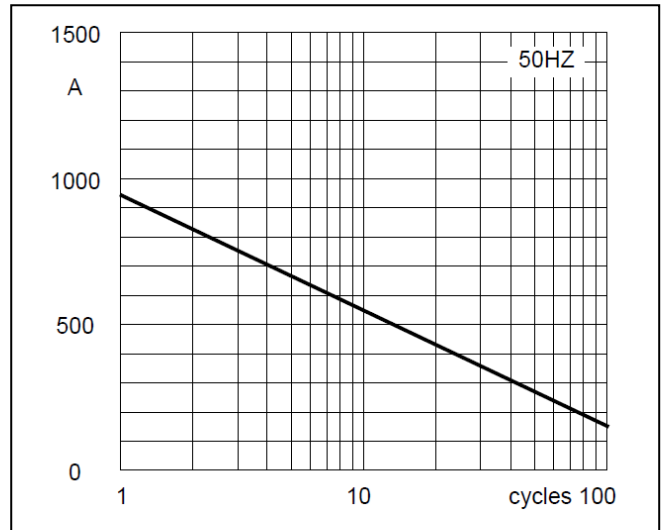
**Fig1. Forward Characteristics**



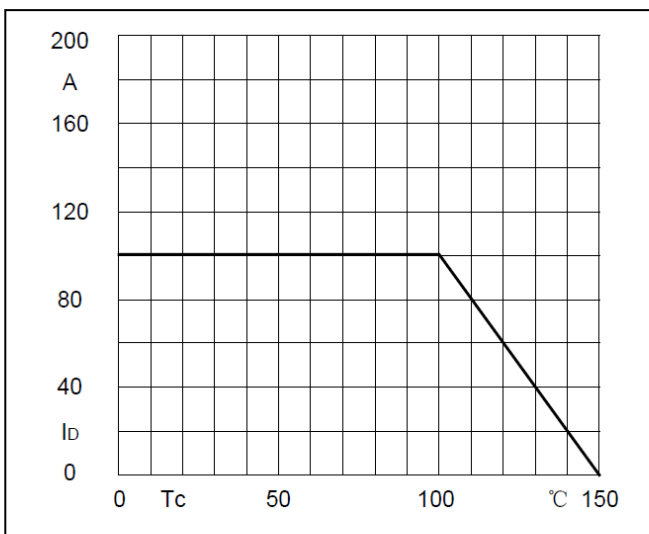
**Fig2. Power dissipation**



**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: 8PCS/BOX ;80PCS/CTN

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