



Micro Commercial Components



Micro Commercial Components  
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 USA  
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**MD60S08M2**  
**MD60S12M2**  
**MD60S16M2**  
**MD60S18M2**

## Features

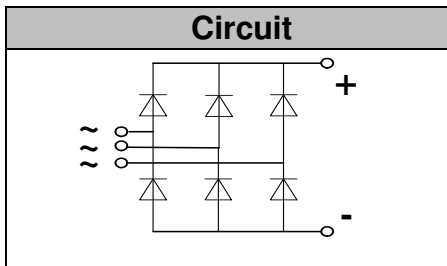
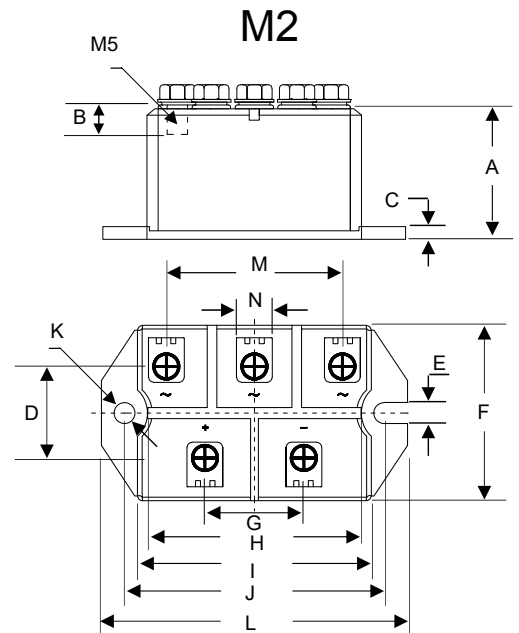
- Lead Free Finish/RoHS Compliant (NOTE 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Blocking Voltage:800 to 1800V
- Heat transfer through aluminum oxide DBC ceramic isolated metal baseplate
- Glass passivated chip

## Applications

- Non-controllable rectifiers for AC/AC converters
- Line rectifiers for transistorized AC motor controllers
- Field supply for DC motors



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



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.161	1.201	29.50	30.50	
B	0.256	0.295	6.50	7.50	
C	0.110	0.138	2.80	3.50	
D	0.831	0.870	21.10	22.10	
E	0.197	0.236	5.00	6.00	
F	1.634	1.673	41.50	42.50	
G	0.886	0.925	22.50	23.50	
H	1.870	1.909	47.50	48.50	
I	2.106	2.146	53.50	54.50	
J	2.343	2.382	59.50	60.50	
K	0.217		5.50		Φ
L	2.815	2.854	71.50	72.50	
M	1.555	1.594	39.50	40.50	
N	0.335	0.374	8.50	9.50	

### Module Type

TYPE	VRRM	VRSM
MD60S08M2	800V	900V
MD60S12M2	1200V	1300V
MD60S16M2	1600V	1700V
MD60S18M2	1800V	1900V

### Maximum Ratings

Symbol	Conditions	Values	Units
ID	Three phase, full wave Tc=110°C	60	A
IFSM	t=10mS Tvj =45°C	460	A
i <sup>2</sup> t	t=10mS Tvj =45°C	1050	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

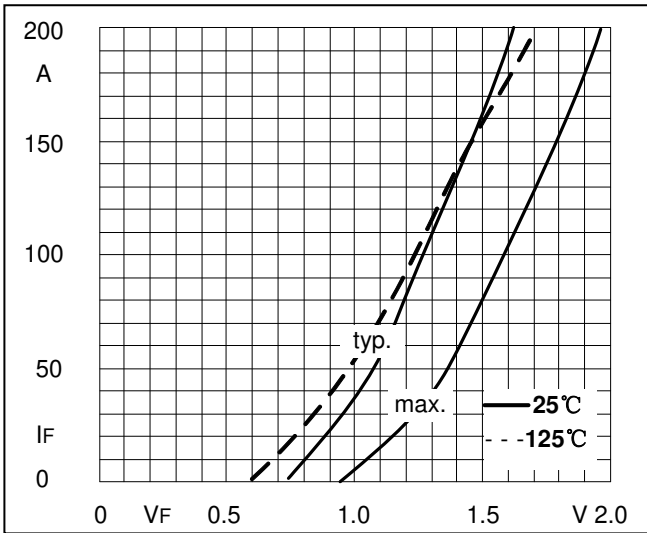
### Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	1.45	°C/W
Rth(c-s)	Module	0.07	°C/W

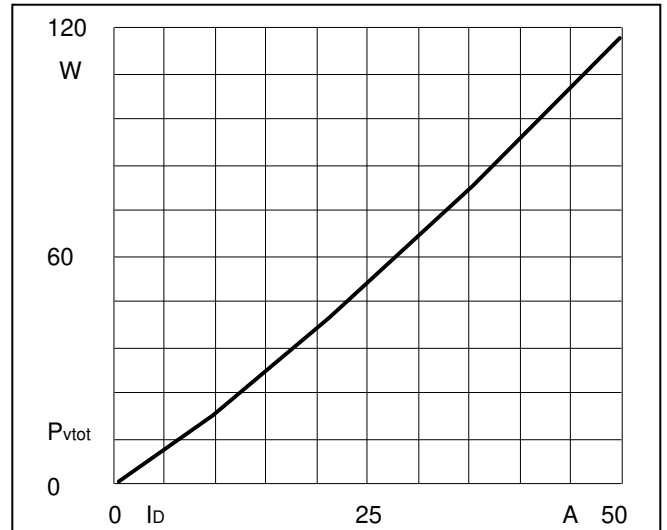
### Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
VFM	T=25°C IF =150A	—	1.45	1.80	V
IRD	Tvj=25°C VRD=VRRM Tvj=150°C VRD=VRRM	—	—	0.3 5	mA mA

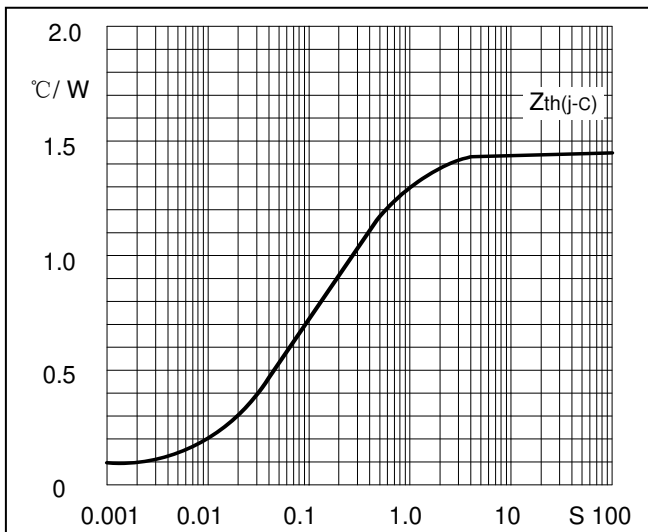
**Performance Curves**



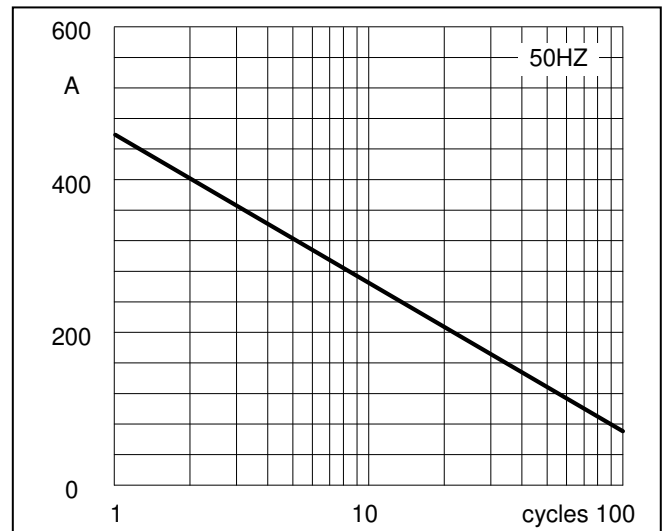
**Fig1. Forward Characteristics**



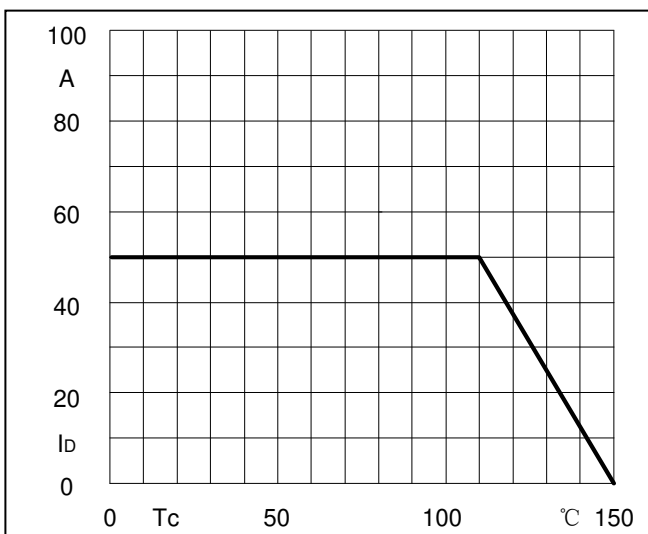
**Fig2. Power dissipation**



**Fig3. Transient thermal impedance**



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



**Fig5. Forward Current Derating Curve**



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### Ordering Information :

Device	Packing
Part Number-BP	Bulk: 8PCS/BOX ;80PCS/CTN

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