·M·C·C·

Micro Commercial Components

RoHS COMPLIANT

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

MD75S08M2
**MD75S12M2**
MD75S16M2
MD75S18M2

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

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

M2

Circuit
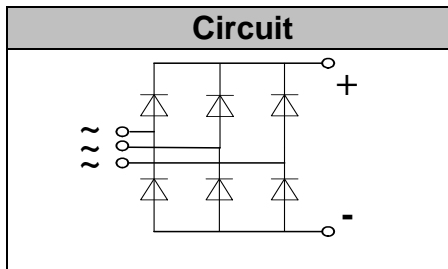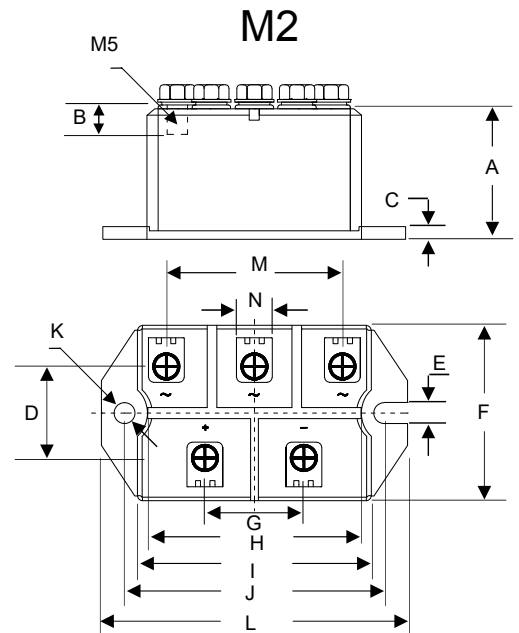
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.161	1.201	29.50	30.50	
B	0.256	0.295	6.50	7.50	
C	0.110	0.138	2.80	3.50	
D	0.831	0.870	21.10	22.10	
E	0.197	0.236	5.00	6.00	
F	1.634	1.673	41.50	42.50	
G	0.886	0.925	22.50	23.50	
H	1.870	1.909	47.50	48.50	
I	2.106	2.146	53.50	54.50	
J	2.343	2.382	59.50	60.50	
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	

DIMENSIONS

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Module Type

TYPE	VRRM	VRSM
MD75S08M2	800V	900V
MD75S12M2	1200V	1300V
MD75S16M2	1600V	1700V
MD75S18M2	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
I_D	Three phase, full wave Tc=110℃	75	A
I_{FSM}	t=10mS Tvj =45℃	750	A
i^2t	t=10mS Tvj =45℃	2800	A^2s
Visol	a.c.50HZ;r.m.s.;1min	3000	V
Tvj		-40 to +150	℃
Tstg		-40 to +125	℃
Mt	To terminals(M5)	3±15%	Nm
Ms	To heatsink(M5)	3±15%	Nm
Weight	Module (Approximately)	130	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	1.1	℃/W
Rth(c-s)	Module(Approximately)	0.07	℃/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V_{FM}	T=25℃ IF =150A	—	1.38	1.60	V
I_{RD}	Tvj=25℃ VRD=VRRM	—	—	0.3	mA
	Tvj=150℃ VRD=VRRM			5	mA

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Performance Curves
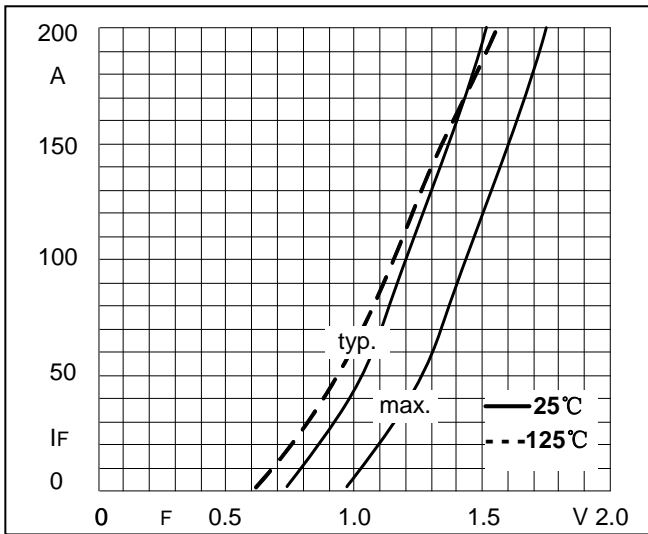
Fig1. Forward Characteristics
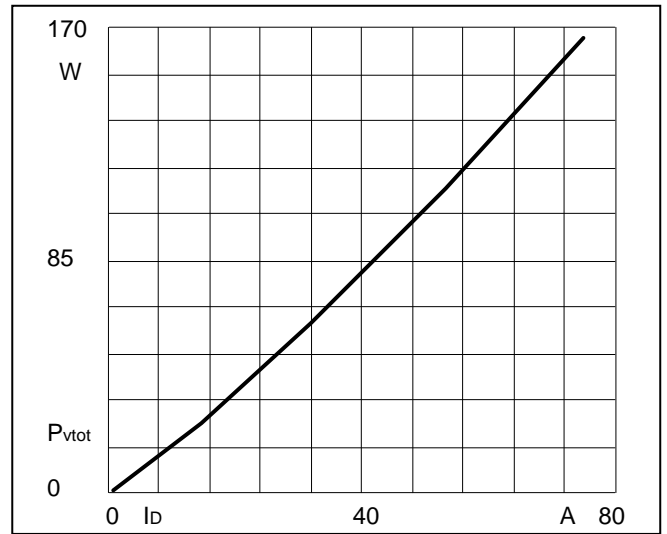
Fig2. Power dissipation
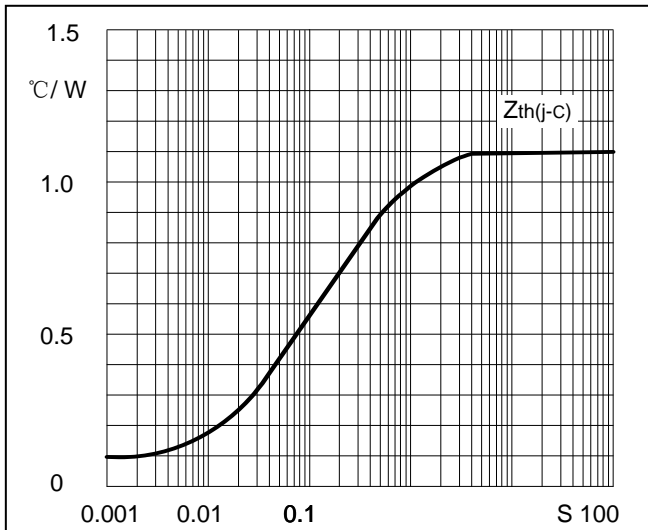
Fig3. Transient thermal impedance
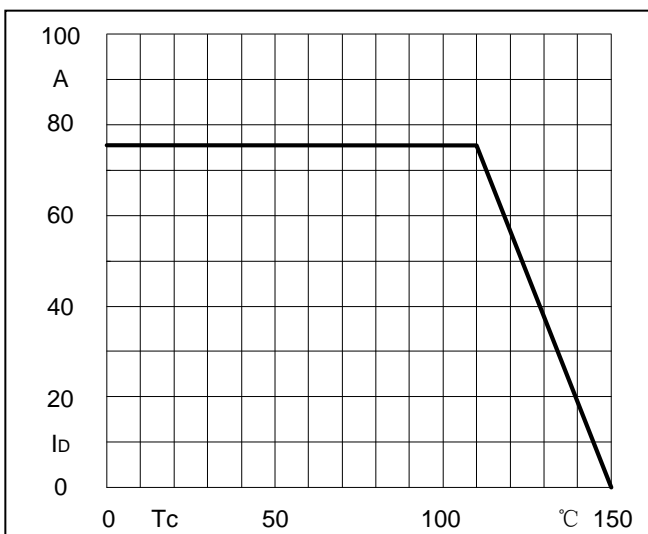
Fig5.Forward Current Derating Curve
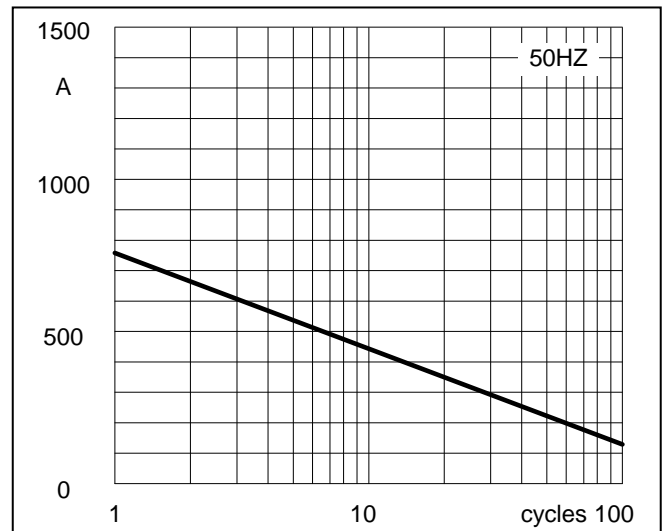
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Ordering Information :

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

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