



Micro Commercial Components



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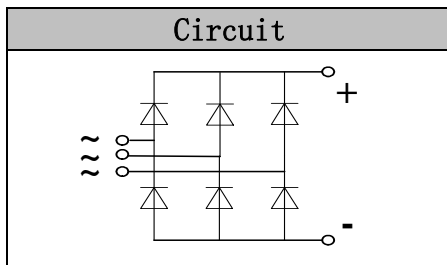
MD100S08M4
MD100S12M4
MD100S16M4
MD100S18M4

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

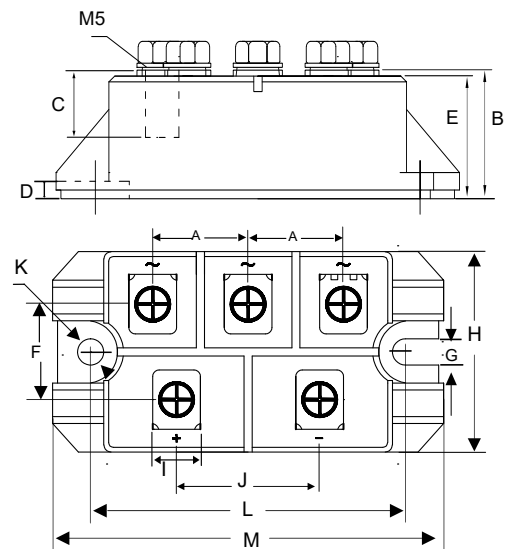
Applications

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



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

M4



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.776	.799	19.70	20.30	
B	.854	.878	21.70	22.30	
C	.440	.465	11.20	11.80	
D	.106	.130	2.70	3.30	
E	.815	.839	20.70	21.30	
F	.776	.799	19.70	20.30	
G	.205	.228	5.20	5.80	
H	1.64	1.67	41.70	42.30	
I	.382	.406	9.70	10.30	
J	1.169	1.193	29.70	30.30	
K		.217		5.50	∅
L	2.59	2.61	65.70	66.30	
M	3.22	3.24	81.70	82.30	

Module Type

TYPE	VRRM	VRSM
MD100S08M4	800V	900V
MD100S12M4	1200V	1300V
MD100S16M4	1600V	1700V
MD100S18M4	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
I _D	Three phase, full wave T _c =100°C	100	A
I _{FSM}	t=10mS T _{vj} =45°C	920	A
i ² t	t=10mS T _{vj} =45°C	4200	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	T terminals(M5)	5±15%	Nm
M _s	T heatsink(M5)	5±15%	Nm
Weight	Module (Approximately)	146	g

Thermal Characteristics

Symbol	Conditions	Values	Units
R _{th(j-c)}	Pe diode	1.0	°C/W
R _{th(c-s)}	Module (Approximately)	0.07	°C/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V _{FM}	T=25°C I _F =300A	—	1.70	1.90	V
I _{RD}	T _{vj} =25°C V _{RD} =V _{RRM}	—	—	0.3	mA
	T _{vj} =150°C V _{RD} =V _{RRM}	—	—	5	mA

Performance Curves

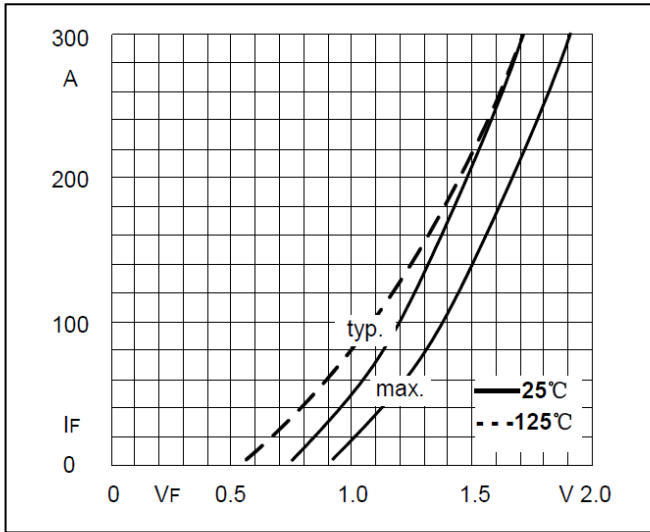


Fig1. Forward Characteristics

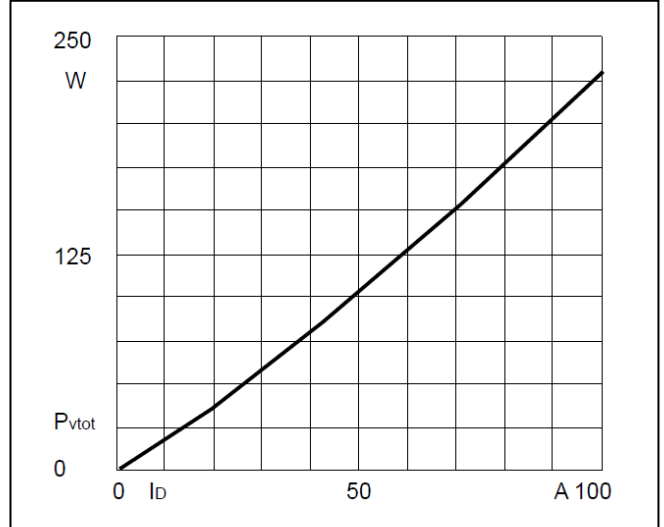


Fig2. Power dissipation

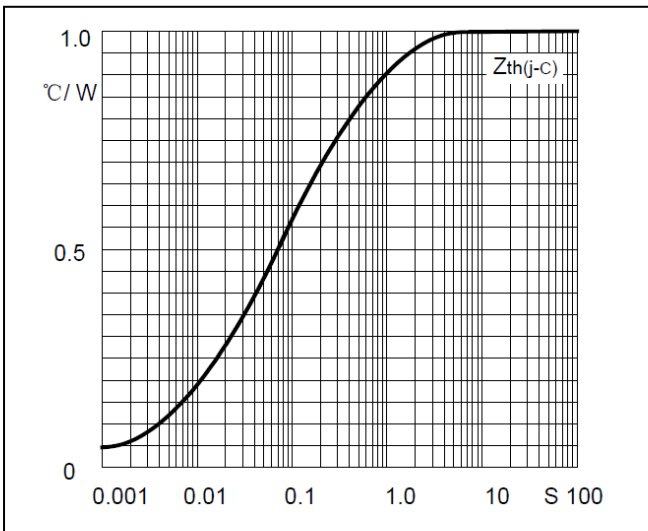


Fig3. Transient thermal impedance

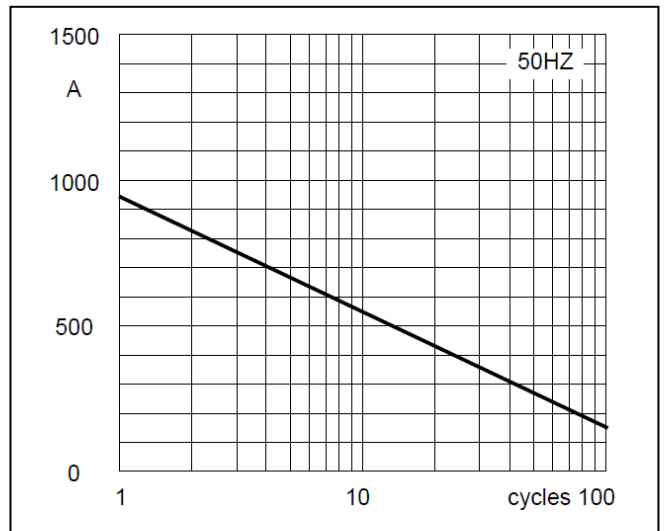


Fig4. Max Non-Repetitive Forward Surge Current

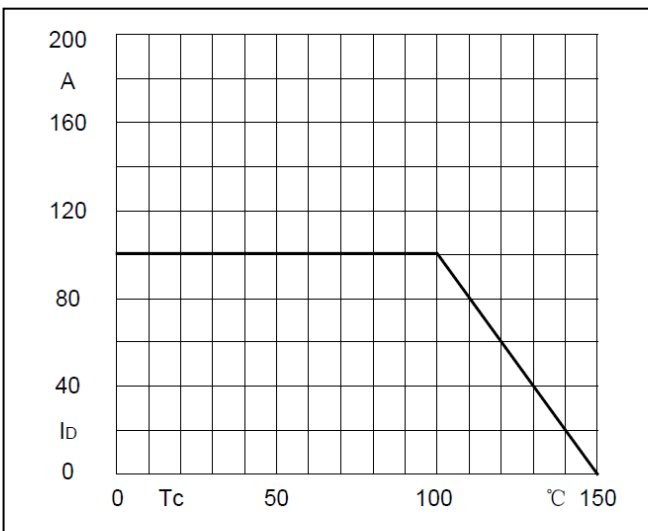


Fig5. Forward Current Derating Curve



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Ordering Information :

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

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