



Micro Commercial Components



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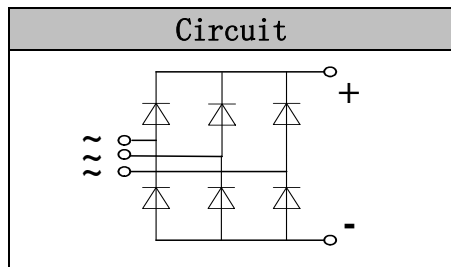
MD100S08M4
MD100S12M4
MD100S16M4
MD100S18M4

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

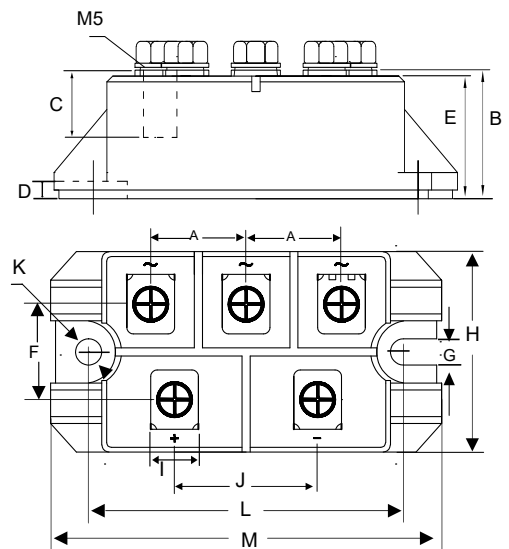
Applications

- 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	.768	.807	19.50	20.50	
B	.846	.886	21.50	22.50	
C	.433	.472	11.00	12.00	
D	.098	.138	2.50	3.50	
E	.807	.846	20.50	21.50	
F	.768	.807	19.50	20.50	
G	.197	.236	5.00	6.00	
H	1.63	1.67	41.50	42.50	
I	.374	.413	9.50	10.50	
J	1.16	1.20	29.50	30.50	
K		.217		5.50	∅
L	2.58	2.62	65.50	66.50	
M	3.21	3.25	81.50	82.50	

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	To terminals(M5)	5±15%	Nm
M _s	To heatsink(M5)	5±15%	Nm
Weight	Module (Approximately)	146	g

Thermal Characteristics

Symbol	Conditions	Values	Units
R _{th(j-c)}	Per 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

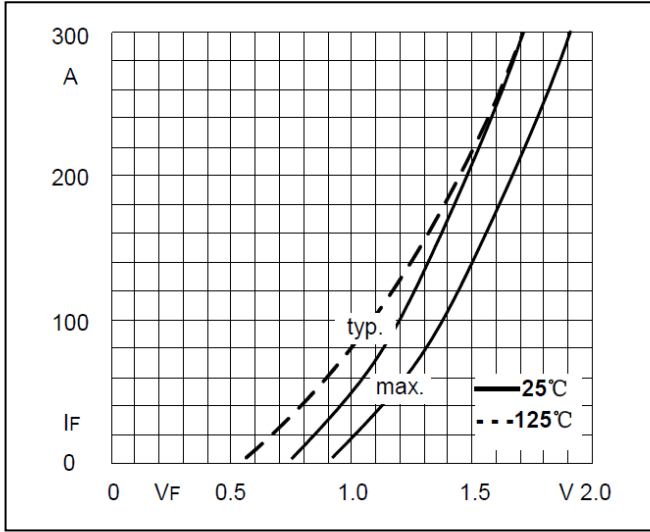


Fig1. Forward Characteristics

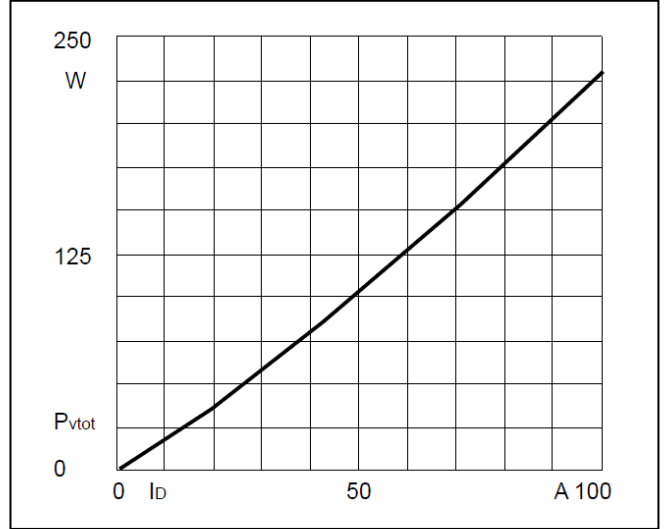


Fig2. Power dissipation

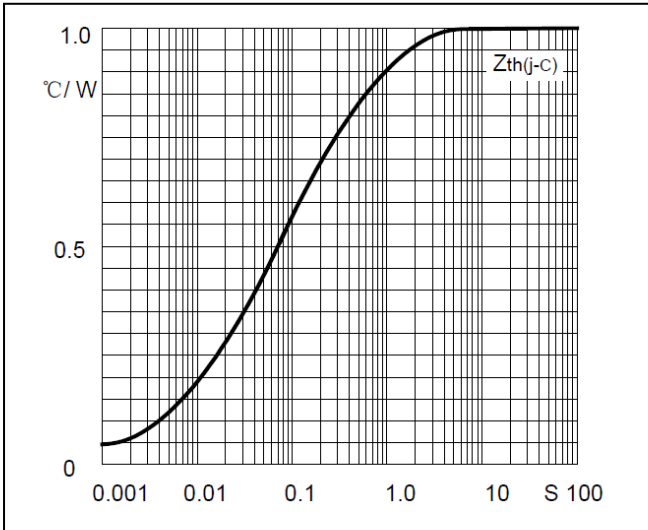


Fig3. Transient thermal impedance

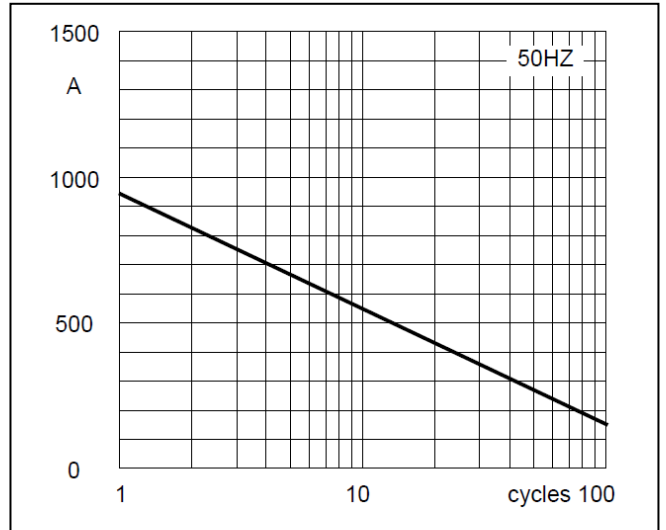


Fig4. Max Non-Repetitive Forward Surge Current

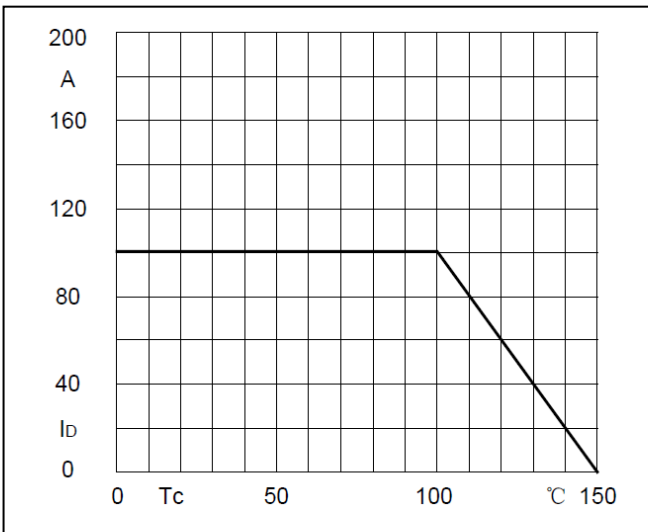


Fig5. Forward Current Derating Curve

Ordering Information :

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

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