



Micro Commercial Components
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MD100S08M2
MD100S12M2
MD100S16M2
MD100S18M2

Features

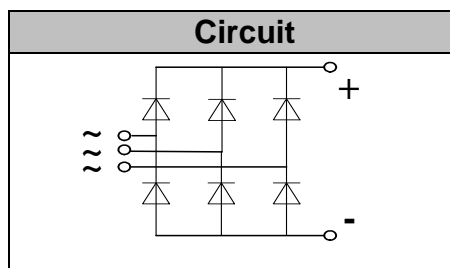
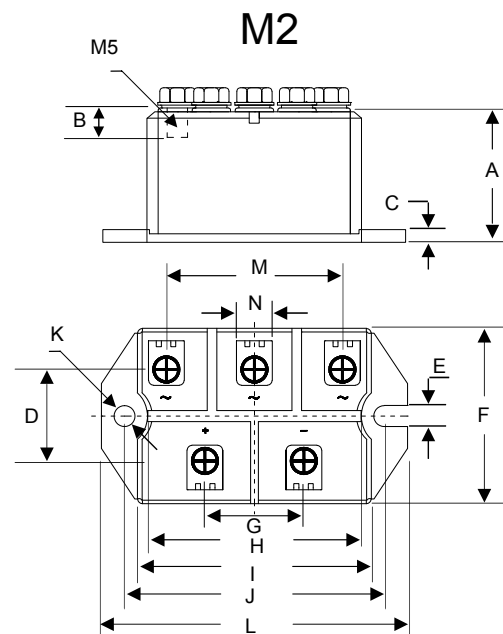
- Lead Free Finish/RoHS Compliant (NOTE 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Blocking Voltage: 800 to 1800V
- Heat transfer through aluminum oxide DBC ceramic isolated metal baseplate
- Glass passivated chip

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



DIMENSIONS					
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		Ø
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	VRS
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 ² t	t=10mS Tvj =45°C	4200	A ² 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 Tvj=150°C VRD=VRRM	—	—	0.3 5	mA mA

Performance Curves

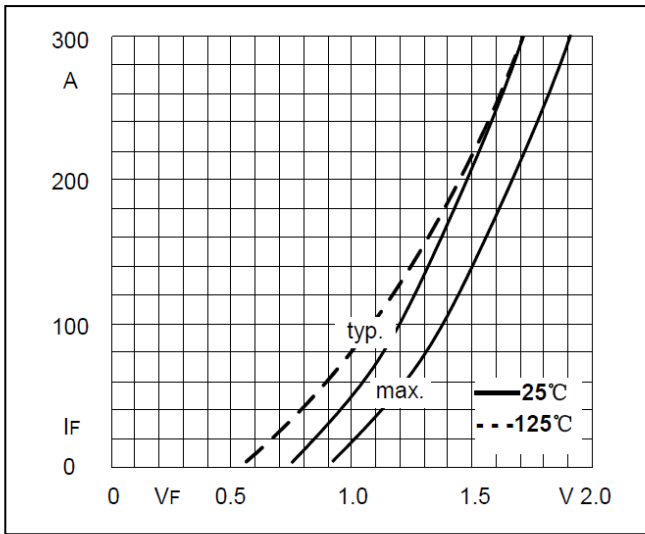


Fig1. Forward Characteristics

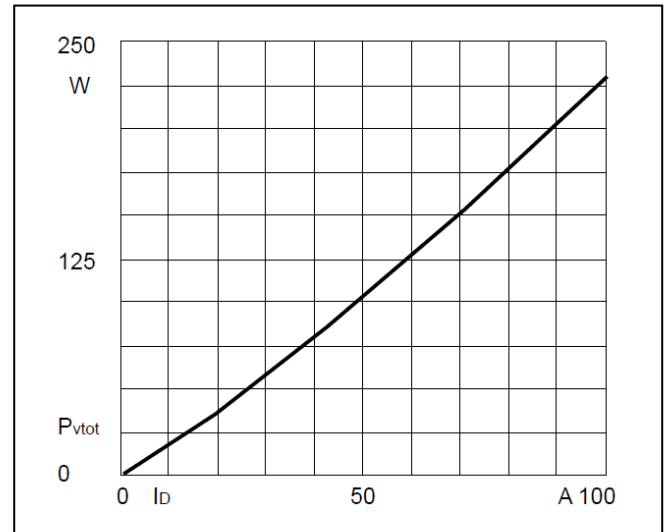


Fig2. Power dissipation

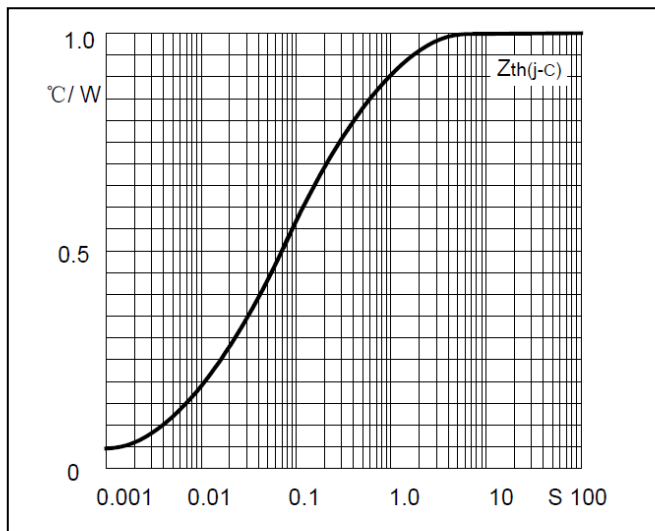


Fig3. Transient thermal impedance

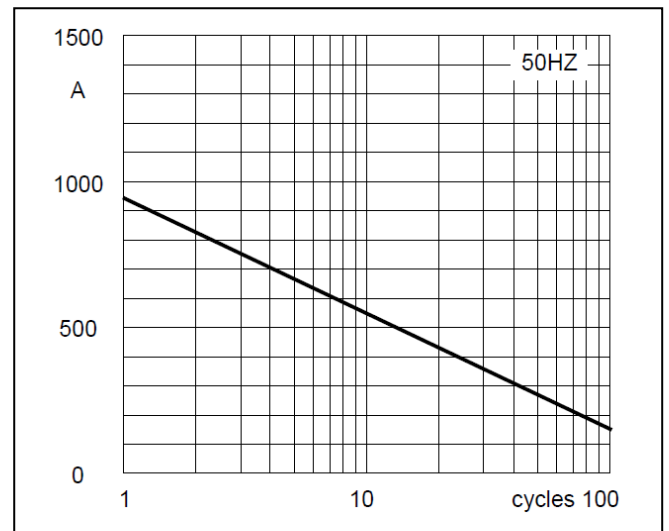


Fig4. Max Non-Repetitive Forward Surge Current

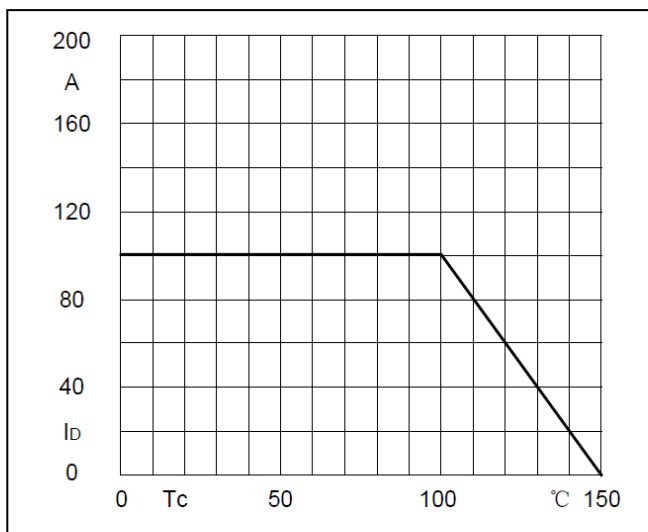


Fig5. Forward Current Derating Curve

Ordering Information :

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

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