Features

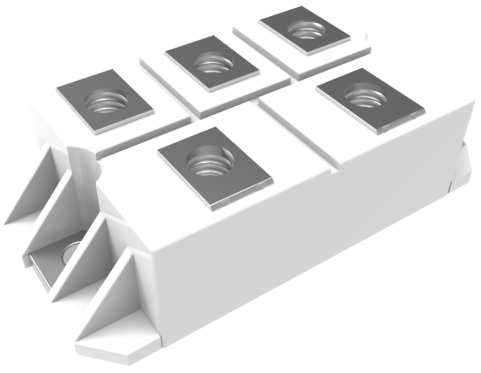
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Heat Transfer Through Aluminum Oxide DBC Ceramic Isolated Metal Baseplate
- Blocking voltage:800 to 1800V
- Glass passivated chip

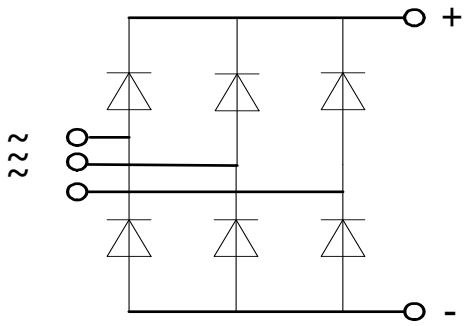
100 Amp GLASS PASSIVATED THREE PHASE RECTIFIER BRIDGE 800~1800 Volts

Applications

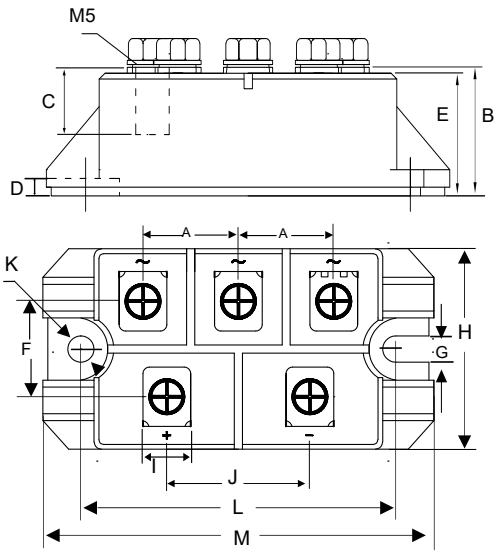
- Three phase rectifiers for power supplies
- Rectifiers for DC motor field supplies
- Battery charger rectifiers

MCC Part Number	V_{RRM}	V_{RSM}
MD100S08M4	800V	900V
MD100S12M4	1200V	1300V
MD100S16M4	1600V	1700V
MD100S18M4	1800V	1900V





M4



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
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		Ø
L	2.58	2.62	65.50	66.50	
M	3.21	3.25	81.50	82.50	

Maximum Ratings

Symbol	Conditions	Values	Units
I_D	Three phase, full wave Tc=100℃	100	A
I_{FSM}	t=10mS Tvj =45℃	920	A
i^2t	t=10mS Tvj =45℃	4200	A^2s
V_{isol}	a.c.50HZ;r.m.s.;1min	3000	V
T_{vj}		-40 to +150	℃
T_{stg}		-40 to +125	℃
Mt	To terminals(M5)	5±15%	Nm
Ms	To heatsink(M5)	5±15%	Nm
Weight	Module (Approximately)	146	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	1.0	℃/W
Rth(c-s)	Module (Approximately)	0.07	℃/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V_{FM}	T=25℃ I_F =300A	—	1.70	1.90	V
I_{RD}	T_{vj}=25℃ V_{RD}=V_{RRM} T_{vj}=150℃ V_{RD}=V_{RRM}	—	—	0.3 5	mA mA

Performance Curves

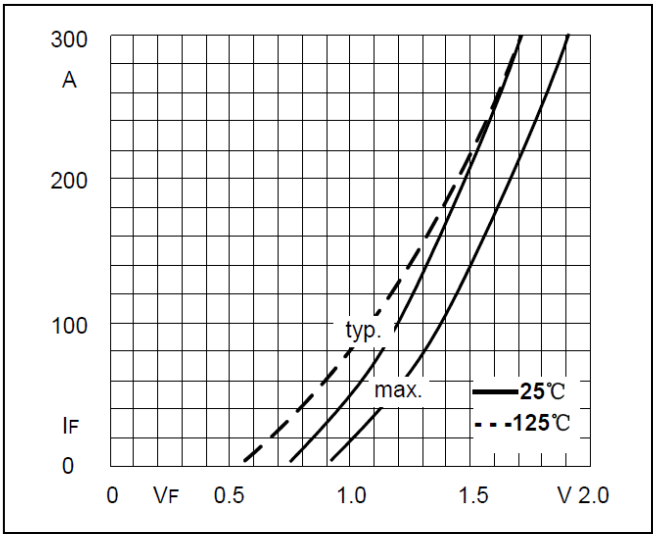


Fig1. Forward Characteristics

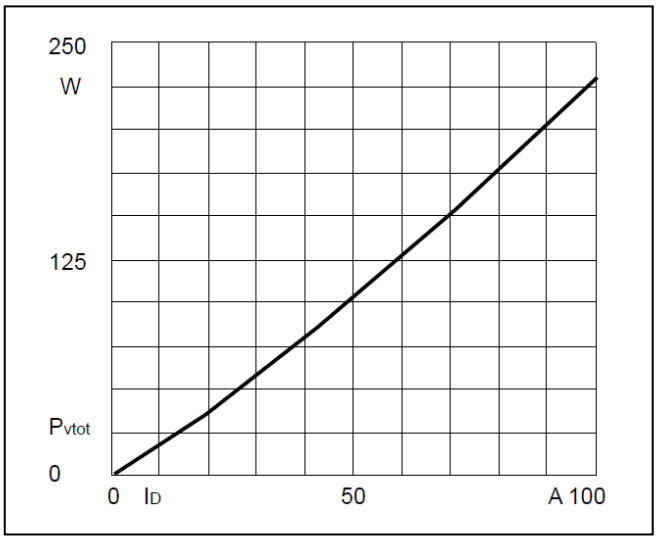


Fig2. Power dissipation

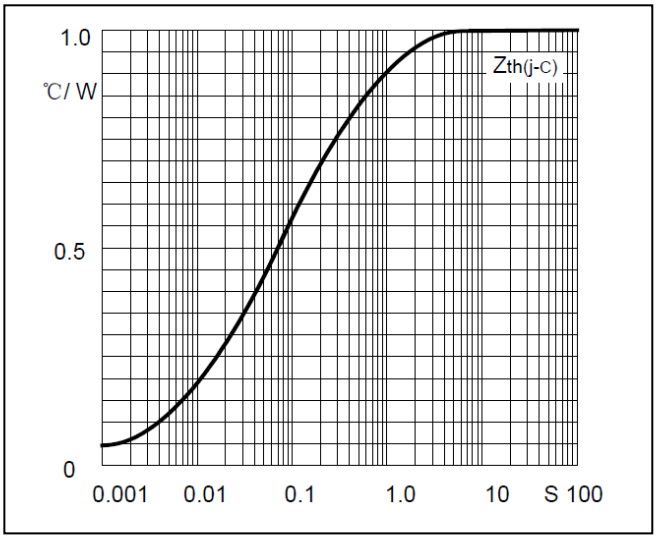


Fig3. Transient thermal impedance

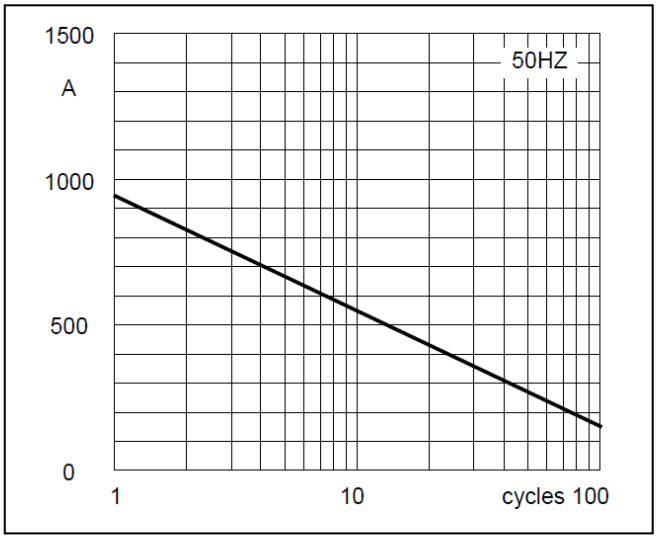


Fig4. Max Non-Repetitive Forward Surge Current

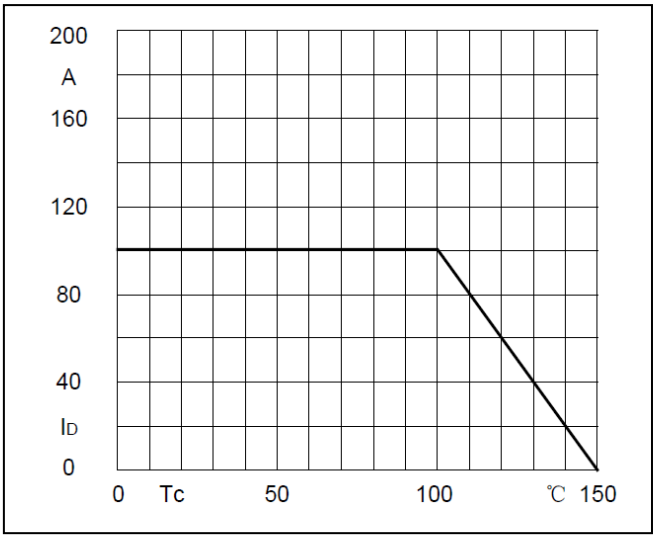


Fig5.Forward Current Derating Curve

Ordering Information

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

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