

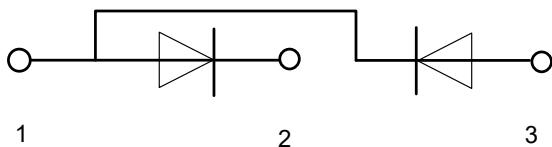
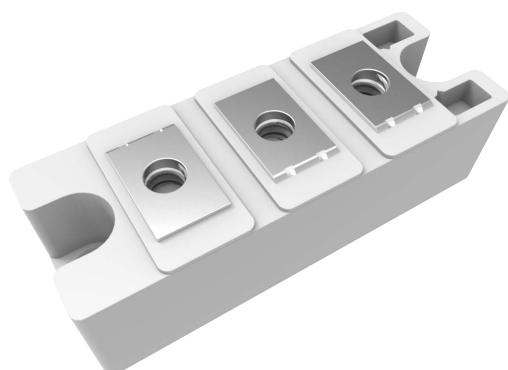
Features

- 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

Applications

- Non-Controllable Rectifiers for AC/AC Converters
- Line Rectifiers for Transistorized AC Motor Controllers
- Field Supply for DC Motors

MCC Part Number	V_{RRM}	V_{RSM}
MD240C08D2	800V	900V
MD240C12D2	1200V	1300V
MD240C16D2	1600V	1700V
MD240C18D2	1800V	1900V



Note: 1. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.

240 Amp GLASS PASSIVATED RECTIFIER DIODE MODULES 800 to 1800 Volts

D2					
M6	A A				
C					
B					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.886	0.925	22.50	23.50	
B	1.161	1.201	29.50	30.50	
C	0.335	0.374	8.50	9.50	
D	0.315	0.350	8.00	8.90	
E	1.043	1.083	26.50	27.50	
F	1.122	1.161	28.50	29.50	
G	3.130	3.169	79.50	80.50	
H	0.492	0.531	12.50	13.50	
I	2.500	2.539	63.50	64.50	
J	3.681	3.720	93.50	94.50	
K	0.256		6.50		Φ
L	0.492	0.531	12.50	13.50	
M	1.319	1.358	33.50	34.50	

Maximum Ratings

Symbol	Conditions	Values	Units
I _{FAV}	Single phase ,half wave 180° conduction T _c =95°C	240	A
I _{FSM}	t=10mS T _{vj} =45°C	7550	A
i ² t	t=10mS T _{vj} =45°C	285000	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(M6)	5±15%	Nm
M _s	To heatsink(M6)	5±15%	Nm
Weight	Module (Approximately)	160	g

Thermal Characteristics

Symbol	Conditions	Values	Units
R _{th(j-c)}	Per diode	0.16	°C/W
R _{th(c-s)}	Module	0.05	°C/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V _{FM}	T=25°C I _F =300A	—	1.15	1.25	V
I _{RD}	T _{vj} =150°C V _{RD} =V _{RRM}	—	—	9	mA
r _f	T _J =25°C	1.16			mΩ
		0.79			V

Performance Curves

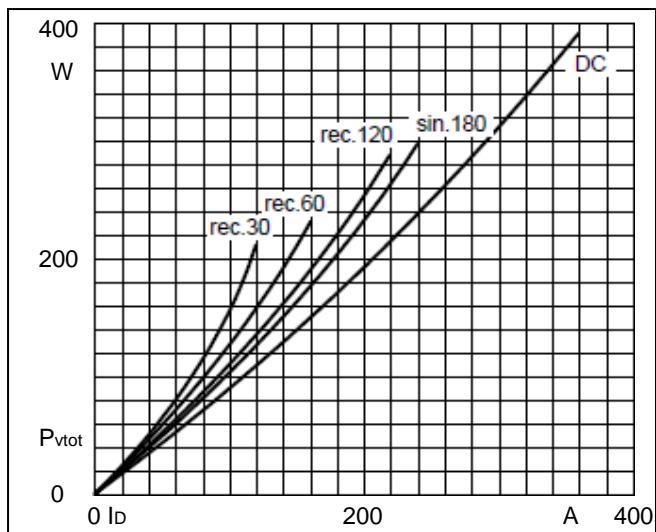


Fig1. Power dissipation

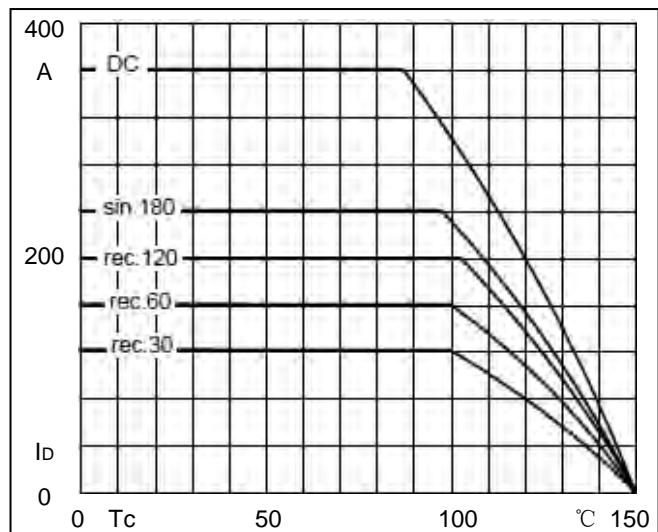


Fig2. Forward Current Derating Curve

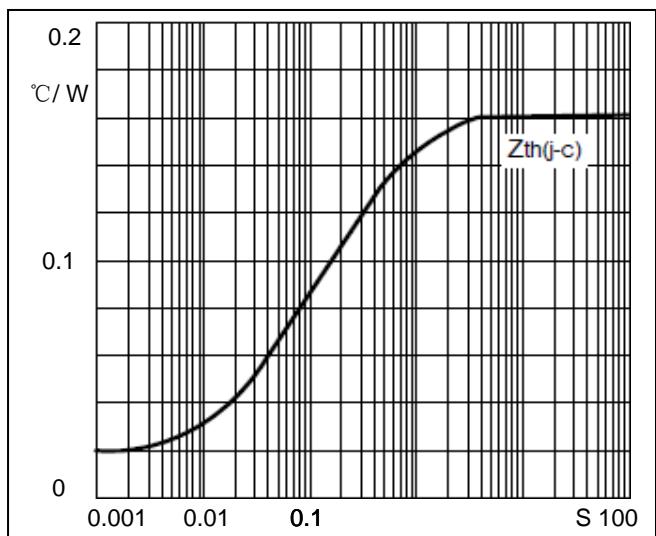


Fig3. Transient thermal impedance

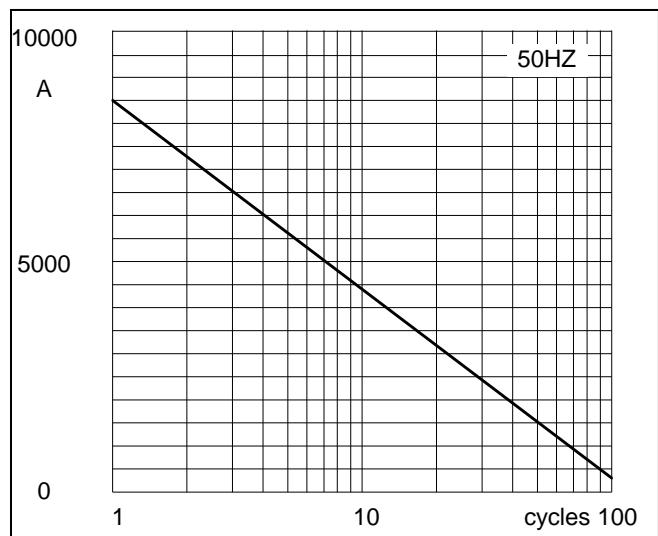


Fig4. Max Non-Repetitive Forward Surge Current

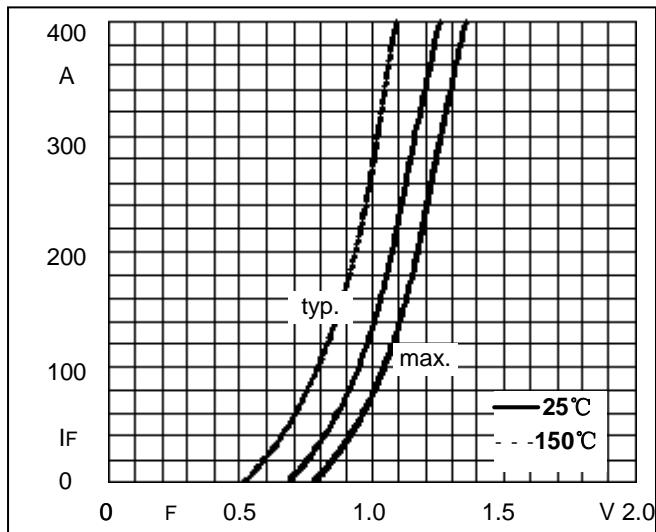


Fig5. Forward Characteristics

Ordering Information

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

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