

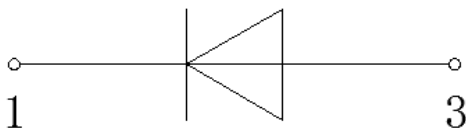
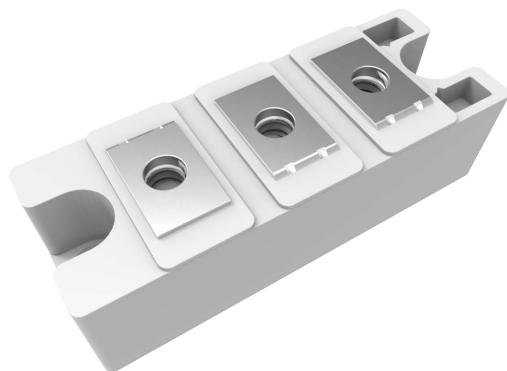
### Features

- 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

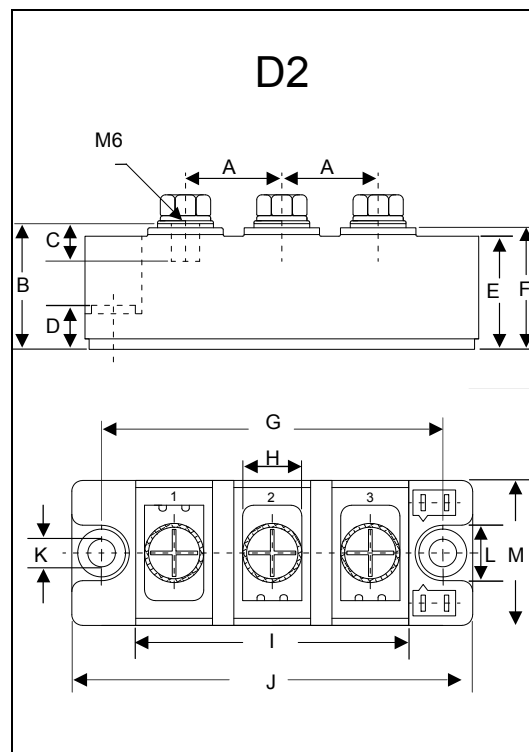
### Applications

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

MCC Part Number	V <sub>RRM</sub>	V <sub>RSM</sub>
MD200U08D2	800V	900V
MD200U12D2	1200V	1300V
MD200U16D2	1600V	1700V
MD200U18D2	1800V	1900V



# 200 Amp GLASS PASSIVATED RECTIFIER DIODE MODULES 800 to 1800 Volts



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	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	

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

**Maximum Ratings**

Symbol	Conditions	Values	Units
IFAV	Single phase ,half wave 180° conduction Tc=101°C	200	A
IFSM	t=10mS Tvj =45°C	6800	A
i <sup>2</sup> t	t=10mS Tvj =45°C	231200	A <sup>2</sup> s
Visol	a.c.50HZ;r.m.s.;1min	3000	V
Tvj		-40 to +150	°C
Tstg		-40 to +125	°C
Mt	T terminals(M6)	5±15%	Nm
Ms	T heatsink(M6)	5±15%	Nm
Weight	Module (Approximately)	160	g

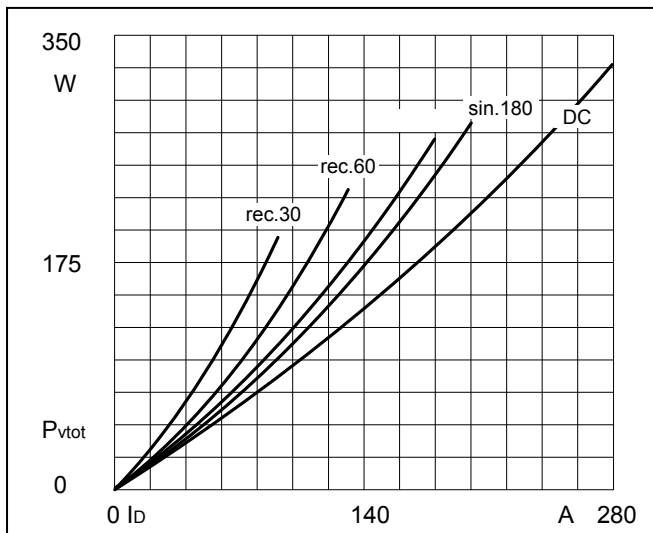
**Thermal Characteristics**

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	0.18	°C/W
Rth(c-s)	Module	0.05	°C/W

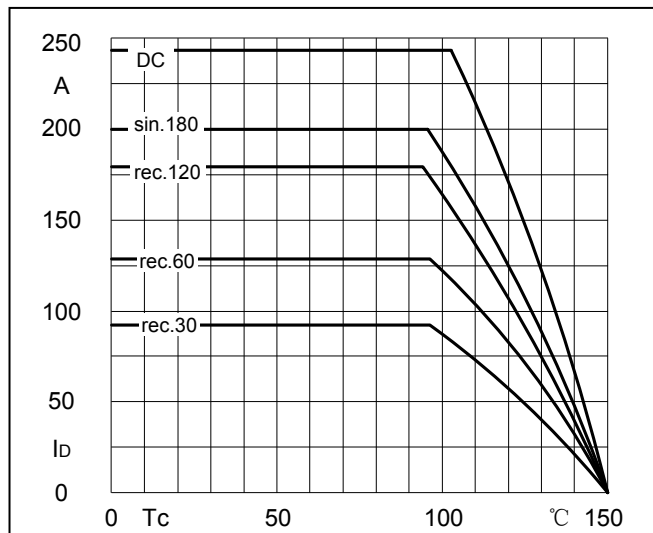
**Electrical Characteristics**

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
VFM	T=25°C IF =300A	—	1.18	1.30	V
IRD	Tvj=150°C VRD=VRRM	—	—	9	mA
r <sub>f</sub>	Tj=25°C		1.13		mΩ
V <sub>f0</sub>			0.84		V

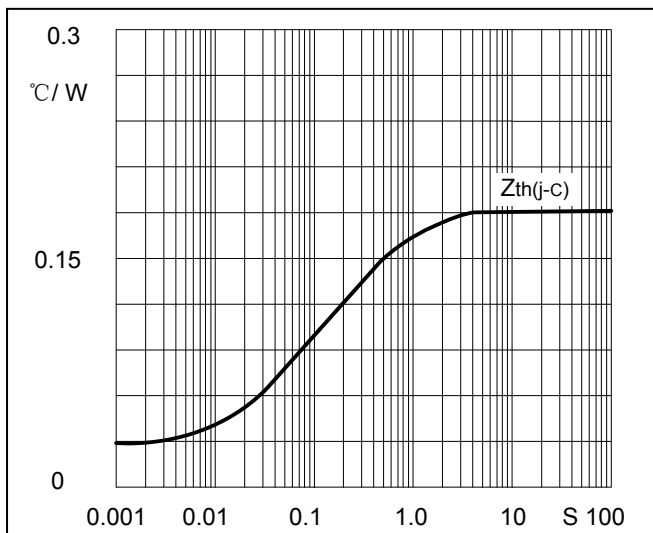
**Performance Curves**



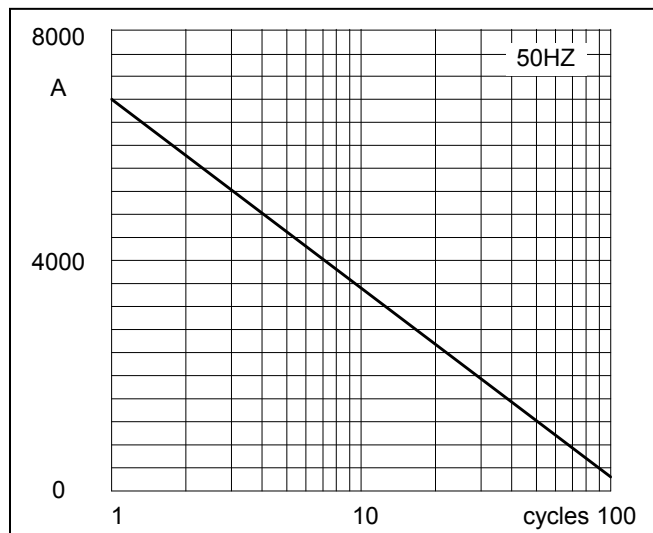
**Fig1. Power dissipation**



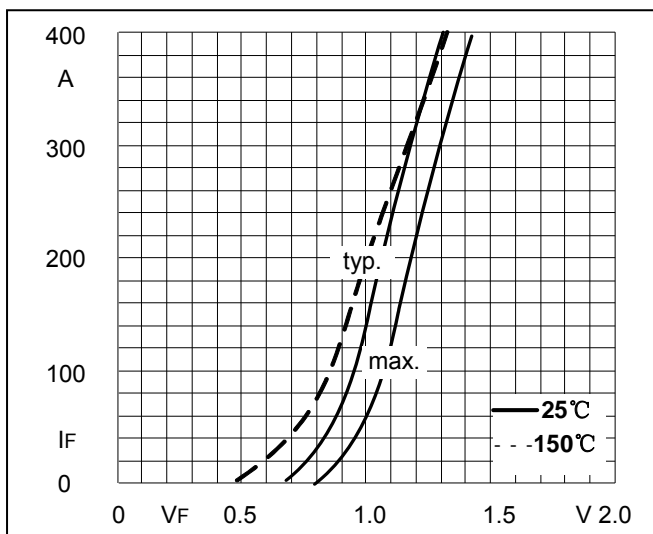
**Fig2. Forward Current Derating Curve**



**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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