

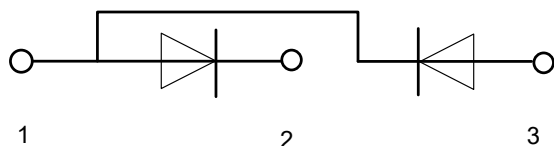
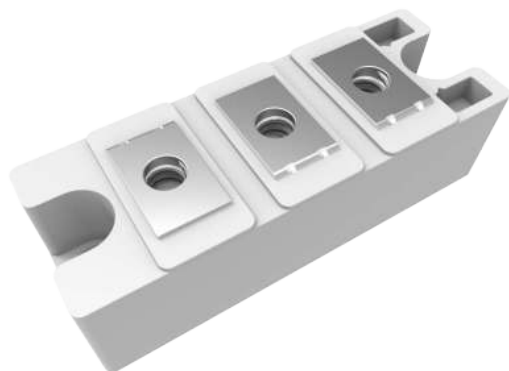
**Features**

- 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

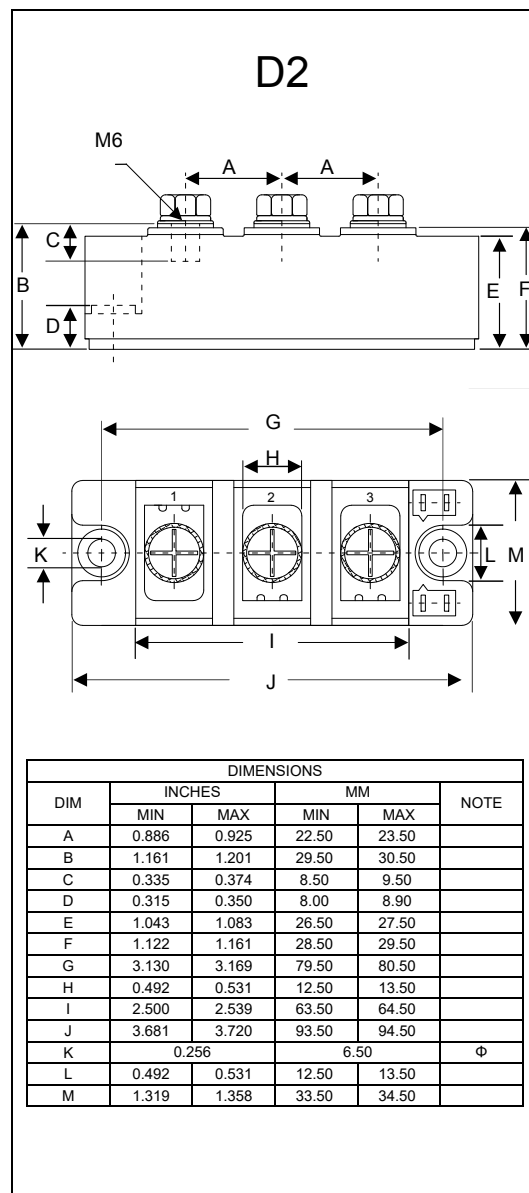
**Applications**

- 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>
MD240C08D2	800V	900V
MD240C12D2	1200V	1300V
MD240C16D2	1600V	1700V
MD240C18D2	1800V	1900V



**240 Amp  
GLASS PASSIVATED  
RECTIFIER DIODE  
MODULES  
800 to 1800 Volts**



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=95°C	240	A
IFSM	t=10mS Tvj =45°C	7550	A
i <sup>2</sup> t	t=10mS Tvj =45°C	285000	A <sup>2</sup> s
V <sub>isol</sub>	a.c.50HZ;r.m.s.;1min	3000	V
T <sub>vj</sub>		-40 to 150	°C
T <sub>stg</sub>		-40 to 125	°C
Mt	To terminals(M6)	5±15%	Nm
Ms	To heatsink(M6)	5±15%	Nm
Weight	Module (Approximately)	160	g

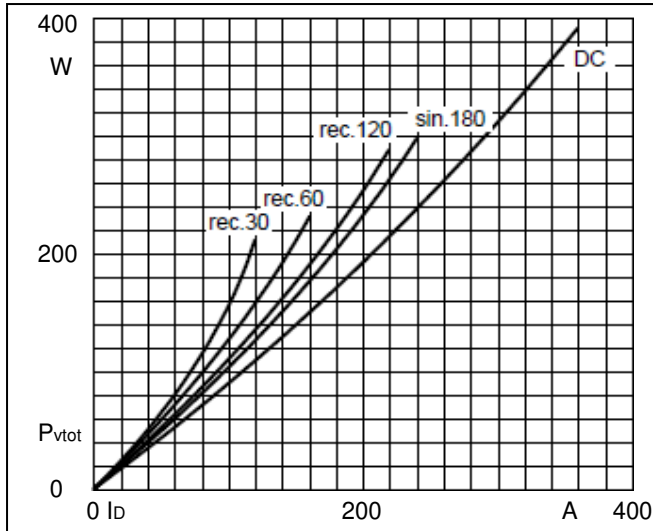
### Thermal Characteristics

Symbol	Conditions	Values	Units
R <sub>th(j-c)</sub>	Per diode	0.16	°C/W
R <sub>th(c-s)</sub>	Module	0.05	°C/W

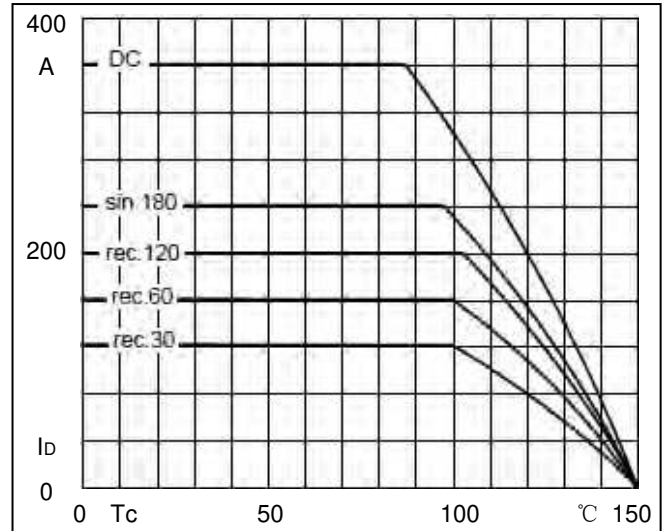
### Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V <sub>FM</sub>	T=25°C IF =300A	—	1.15	1.25	V
I <sub>RD</sub>	T <sub>vj</sub> =150°C V <sub>RD</sub> =V <sub>RRM</sub>	—	—	9	mA
r <sub>f</sub>	T <sub>J</sub> =25°C		1.16		mΩ
V <sub>fO</sub>			0.79		V

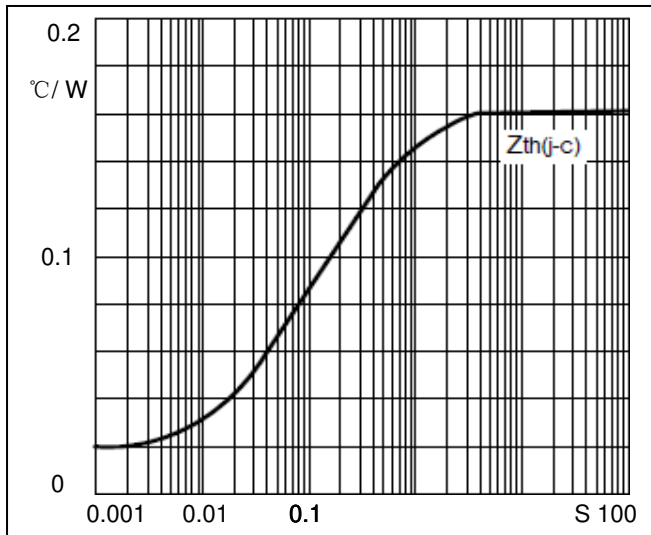
**Performance Curves**



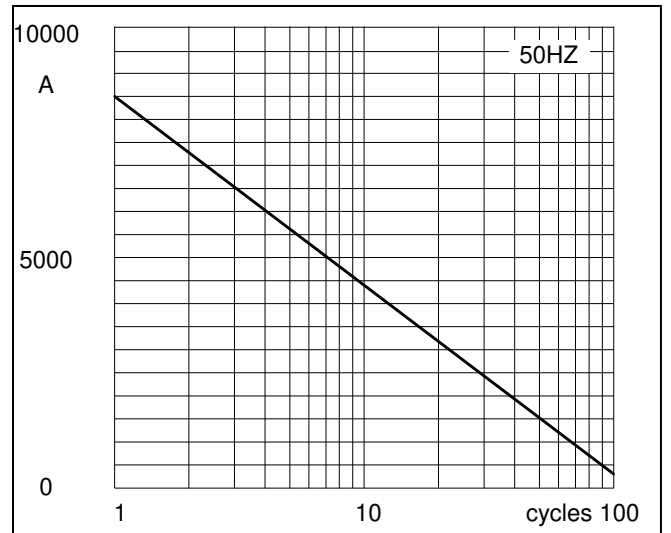
**Fig1. Power dissipation**



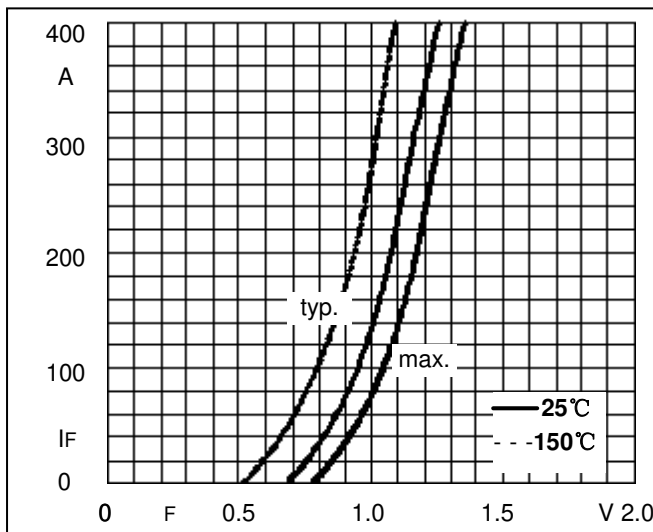
**Fig2. Forward Current Derating Curve**



**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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