

#### **Features**

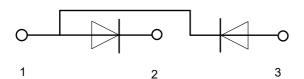
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Heat Transfer Through Aluminum Oxide DBC Ceramic Isolated Metal Baseplate
- Blocking voltage:800 to 1800V
- · Glass passivated chip

## **Applications**

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

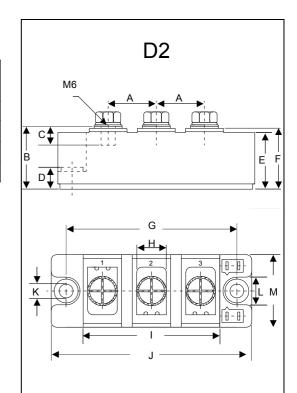
MCC Part Number	$V_{RRM}$	$V_{RSM}$
MD240C08D2	800V	900V
MD240C12D2	1200V	1300V
MD240C16D2	1600V	1700V
MD240C18D2	1800V	1900V





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

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



DIMENSIONS					
DIM	INCHES		N	MM	
	MIN	MAX	MIN	MAX	NOTE
Α	0.886	0.925	22.50	23.50	
В	1.161	1.201	29.50	30.50	
С	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	
Н	0.492	0.531	12.50	13.50	
ı	2.500	2.539	63.50	64.50	
J	3.681	3.720	93.50	94.50	
K	0.2	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
IFAV	Single phase ,half wave 180° conduction Tc=95°C	240	Α
İFSM	t=10mS Tvj =45℃	7550	Α
i <sup>2</sup> t	t=10mS Tvj =45℃	285000	A <sup>2</sup> s
Visol	a.c.50HZ;r.m.s.;1min	3000	V
Tvj		-40 to 150	$^{\circ}$
Tstg		-40 to 125	$^{\circ}\mathbb{C}$
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
Rth(j-c)	Per diode	0.16	°C/W
Rth(c-s)	Module	0.05	°C/W

## **Electrical Characteristics**

Symbol	Conditions	Values			Units
		Min.	Тур.	Max.	Ullits
VFM	T=25°C IF =300A	_	1.15	1.25	V
Ird	Tvj=150℃ VRD=VRRM	_	_	9	mA
r <sub>f</sub>	T -25°C		1.16		mΩ
$V_{fO}$	T <sub>J</sub> =25℃		0.79		V

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## **Performance Curves**

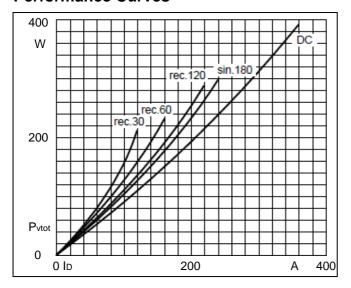


Fig1. Power dissipation

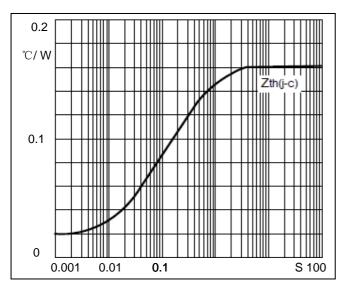


Fig3. Transient thermal impedance

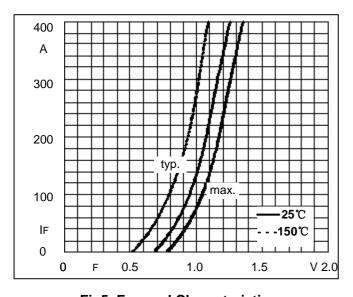
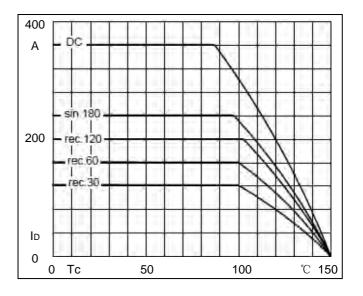


Fig5. Forward Characteristics



**Fig2.Forward Current Derating Curve** 

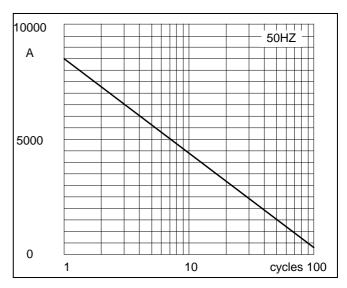


Fig4. Max Non-Repetitive Forward Surge Current



## **Ordering Information**

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

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