

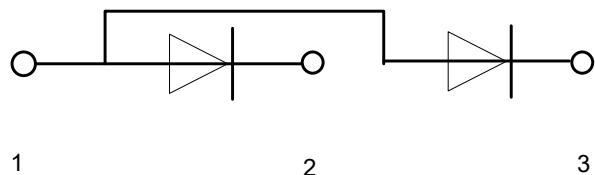
### Features

- 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

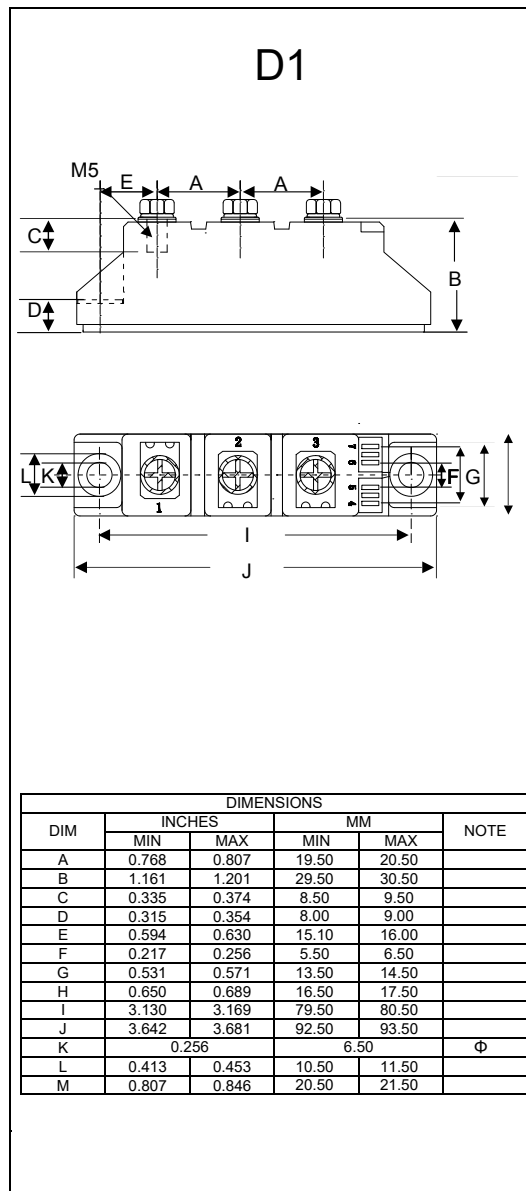
### Applications

- 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>
MD100A08D1	800V	900V
MD100A12D1	1200V	1300V
MD100A16D1	1600V	1700V
MD100A18D1	1800V	1900V



## 100 Amp GLASS PASSIVATED RECTIFIER DIODE MODULES 800~1800 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=109°C	100	A
IFSM	t=10mS Tvj =45°C	2500	A
i <sup>2</sup> t	t=10mS Tvj =45°C	31250	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	To terminals(M5)	3±15%	Nm
Ms	To heatsink(M6)	5±15%	Nm
Weight	Module (Approximately)	100	g

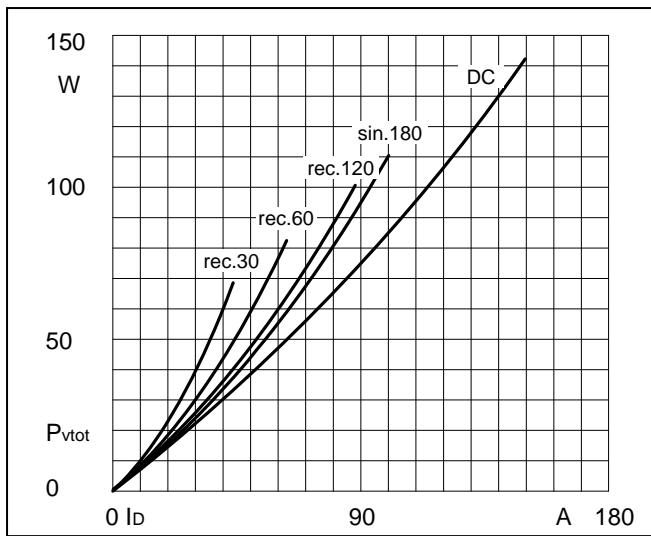
**Thermal Characteristics**

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	0.35	°C/W
Rth(c-s)	Module	0.1	°C/W

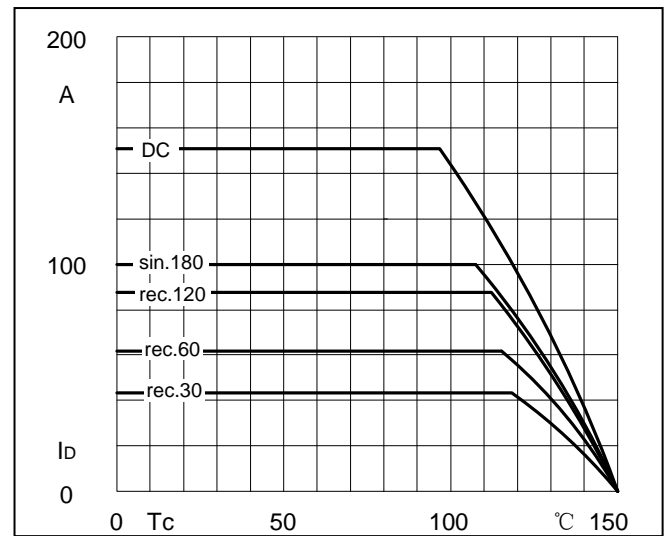
**Electrical Characteristics**

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
VFM	T=25°C IF =300A	—	1.20	1.40	V
IRD	Tvj=150°C VRD=VRRM	—	—	5	mA

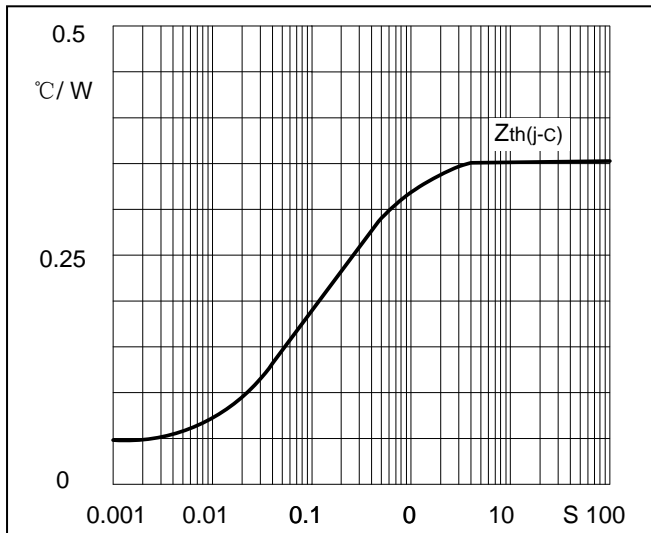
**Performance Curves**



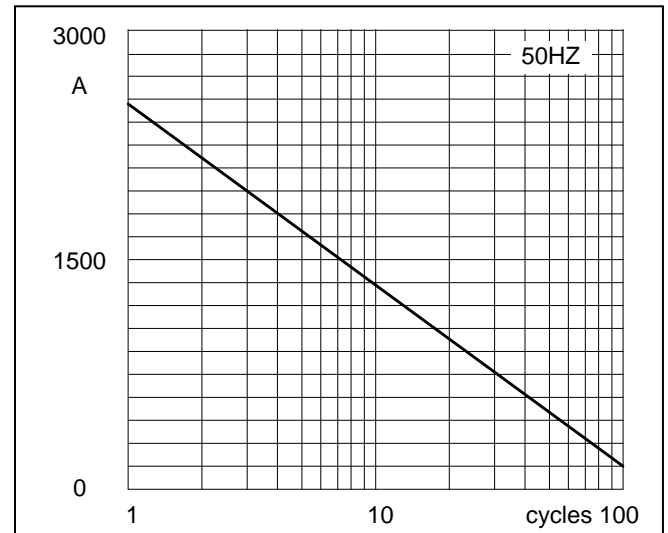
**Fig1. Power dissipation**



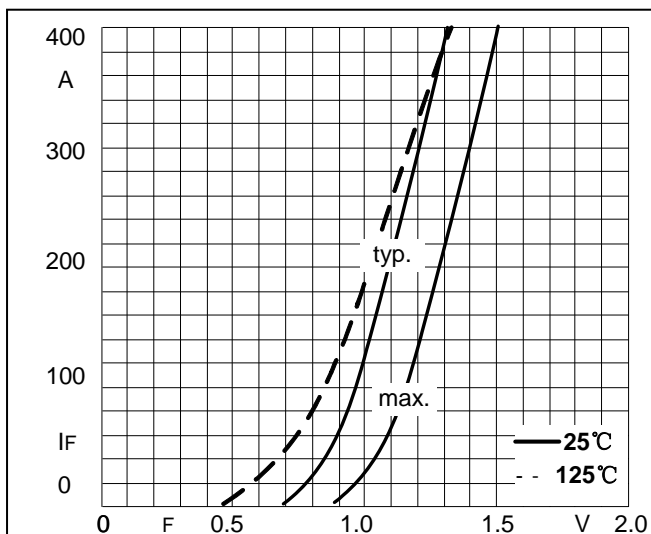
**Fig2. Forward Current Derating Curve**



**Fig3. Transient thermal impedance**



**Fig4. Max Non-Repetitive Forward Surge Current**



**Fig5. Forward Characteristics**

## Ordering Information

Device	Packing
Part Number-BP	Bulk: 10PCS/BOX ;100PCS/CTN

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