



Micro Commercial Components

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20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

**MD200K08D2
MD200K12D2
MD200K16D2
MD200K18D2**

Features

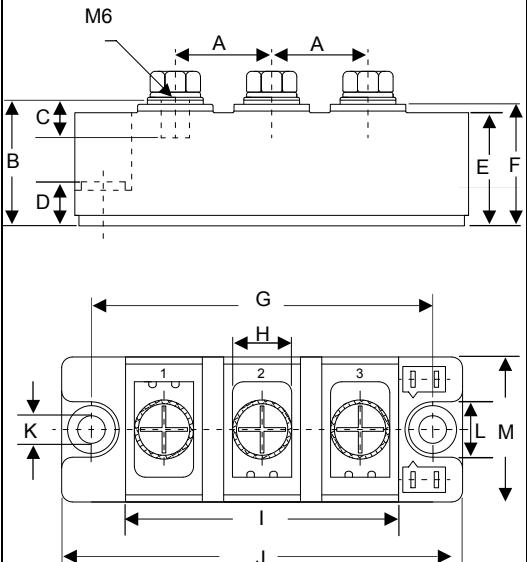
- Lead Free Finish/RoHS Compliant (NOTE 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Blocking Voltage: 800 to 1800V
- Heat transfer through aluminum oxide DBC ceramic isolated metal baseplate
- Glass passivated chip

Applications

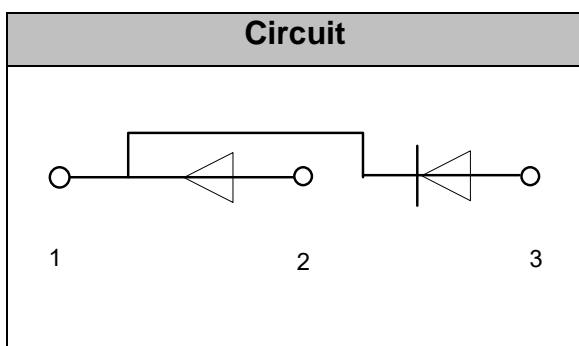
- Non-controllable rectifiers for AC/AC converters
- Line rectifiers for transistorized AC motor controllers
- Field supply for DC motors

**200 Amp
GLASS PASSIVATED
RECTIFIER DIODE
MODULES
800~1800 Volts**

D2



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.894	.917	22.70	23.30	
B	1.169	1.193	29.70	30.30	
C	.343	.366	8.70	9.30	
D	.323	.343	8.20	8.70	
E	1.051	1.075	26.70	27.30	
F	1.130	1.154	28.70	29.30	
G	.120	.130	79.70	80.30	
H	.500	.524	12.70	13.30	
I	2.501	2.531	63.70	64.30	
J	3.689	3.713	93.70	94.30	
K	.256		6.50		Ø
L	.500	.524	12.70	13.30	
M	1.327	1.350	33.70	34.30	



Module Type

TYPE	V _{RRM}	V _{RSM}
MD200K08D2	800V	900V
MD200K12D2	1200V	1300V
MD200K16D2	1600V	1700V
MD200K18D2	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
I _{FAV}	Single phase ,half wave 180° conduction T _c =95°C	200	A
I _{FSM}	t=10mS T _{vj} =45°C	6800	A
i ² t	t=10mS T _{vj} =45°C	231200	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	0.18	°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	—	1.18	1.30	V
I _{RD}	T _{vj} =150°C V _{RD} =V _{RRM}	—	—	9	mA
r _f	T _j =25°C		1.13		mΩ
			0.84		V

Performance Curves

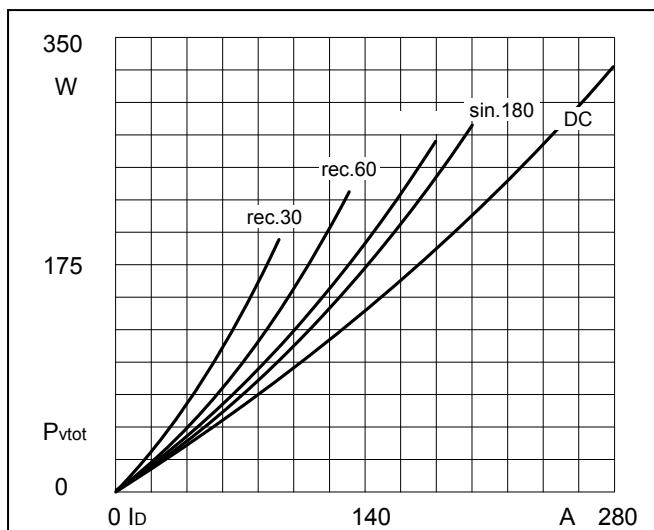


Fig1. Power dissipation

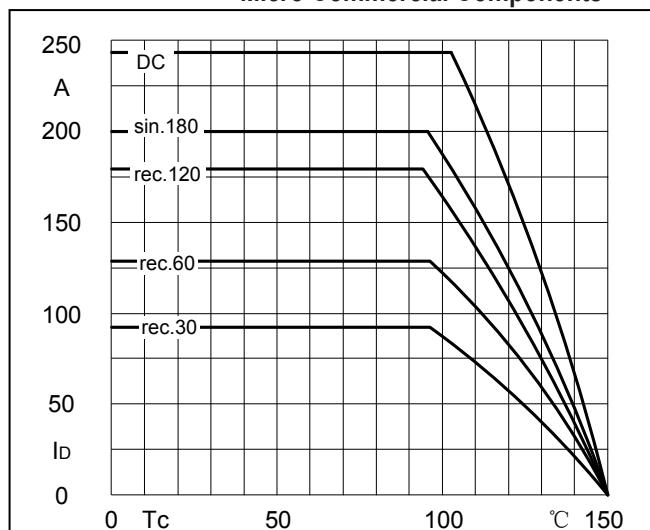


Fig2. Forward Current Derating Curve

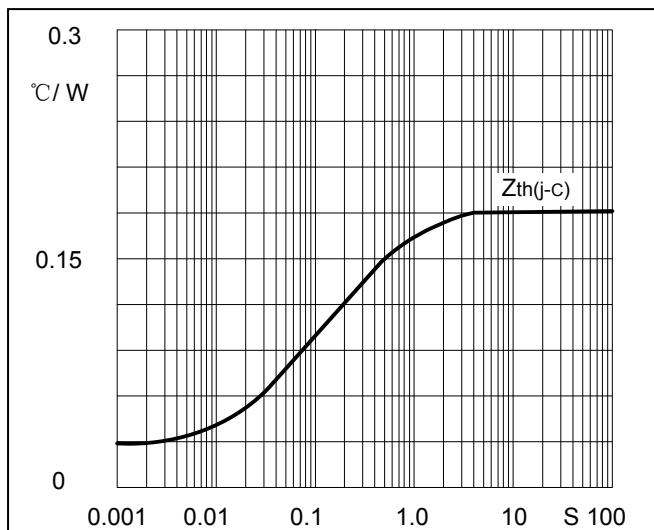


Fig3. Transient thermal impedance

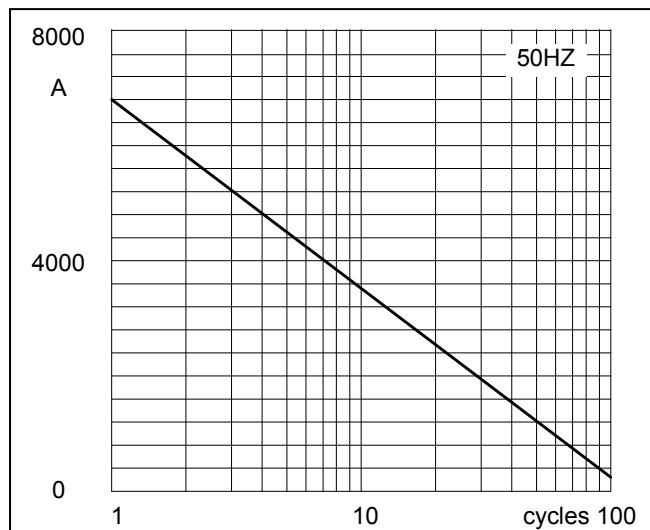


Fig4. Max Non-Repetitive Forward Surge Current

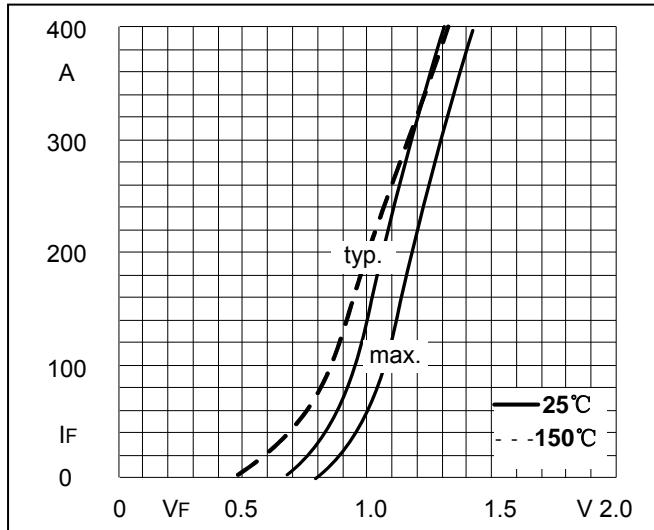


Fig5. Forward Characteristics



Ordering Information :

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

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