



Micro Commercial Components
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MD200K08D2
MD200K12D2
MD200K16D2
MD200K18D2

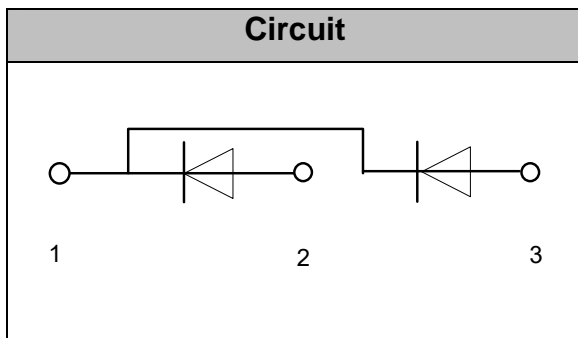
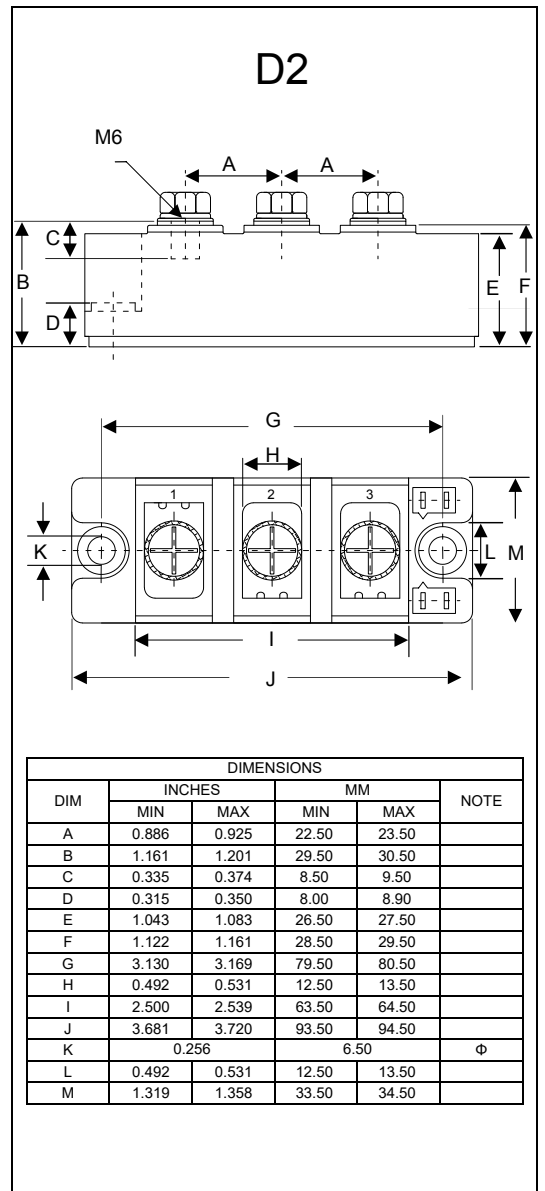
200 Amp
GLASS PASSIVATED
RECTIFIER DIODE
MODULES
800~1800 Volts

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



Module Type

TYPE	VRRM	VRSM
MD200K08D2	800V	900V
MD200K12D2	1200V	1300V
MD200K16D2	1600V	1700V
MD200K18D2	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
IFAV	Single phase ,half wave 180° conduction Tc=95°C	200	A
IFSM	t=10mS Tvj =45°C	6800	A
i ² t	t=10mS Tvj =45°C	231200	A ² s
V _{isol}	a.c.50HZ;r.m.s.;1min	3000	V
Tvj		-40 to 150	°C
Tstg		-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 _{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}	Tvj=150°C V _{RD} =V _{RRM}	—	—	9	mA
r _f	T _J =25°C		1.13		mΩ
V _{fO}			0.84		V

Performance Curves

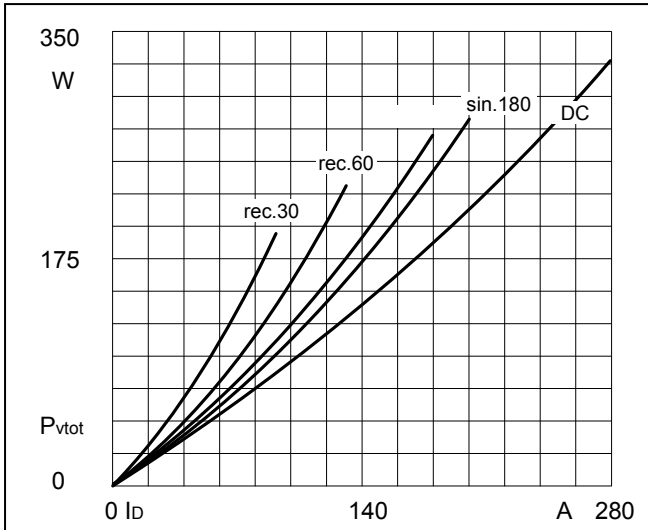


Fig1. Power dissipation

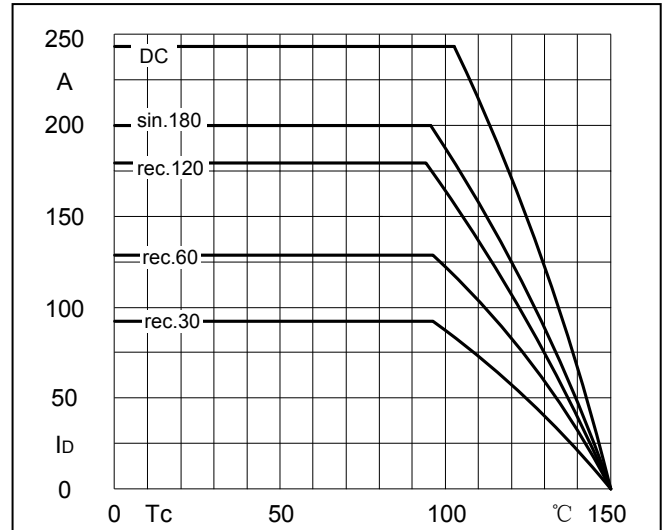


Fig2. Forward Current Derating Curve

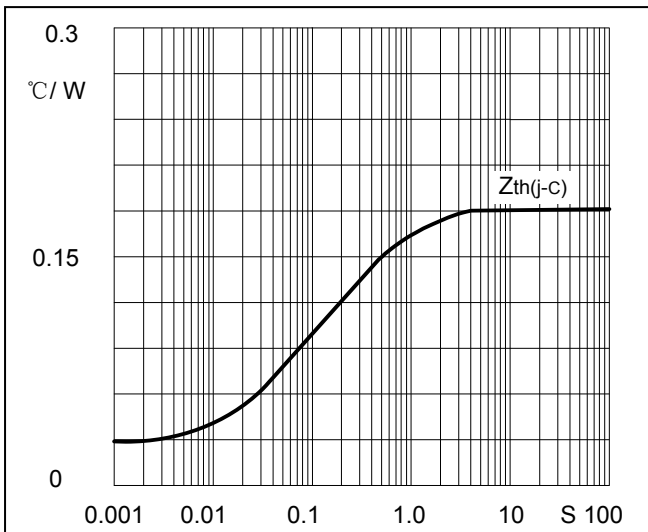


Fig3. Transient thermal impedance

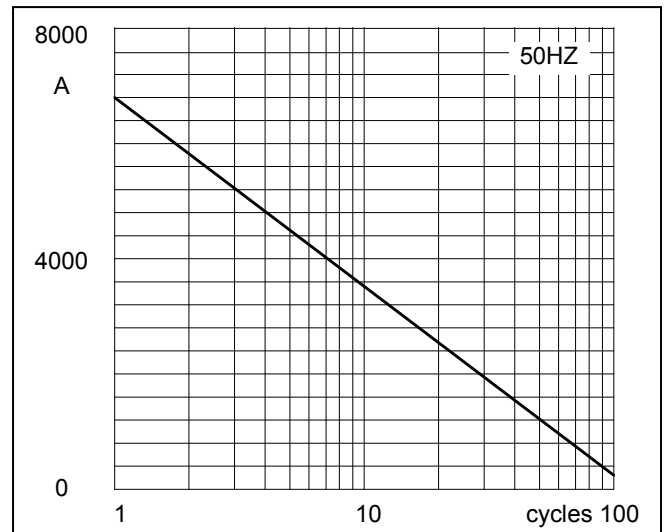


Fig4. Max Non-Repetitive Forward Surge Current

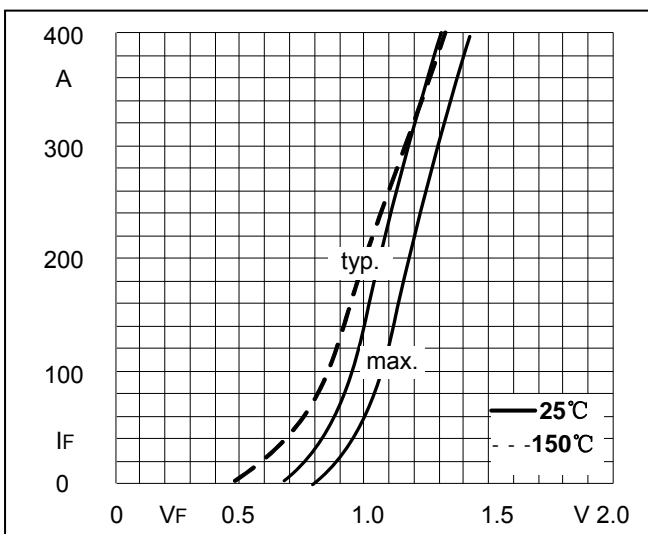


Fig5. Forward Characteristics



Micro Commercial Components®

Ordering Information :

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

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