

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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MD36C08D1 MD36C12D1 MD36C16D1 MD36C18D1

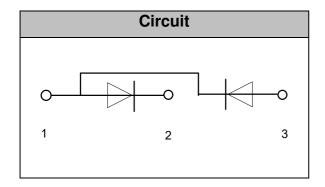
## **Features**

- 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

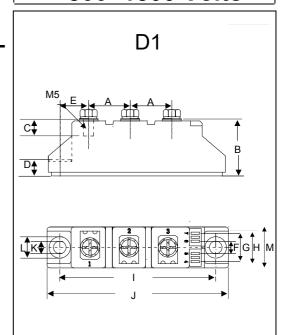
## **Applications**

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





# 36 Amp GLASS PASSIVATED RECTIFIER DIODE MODULES 800~1800 Volts



A .776 .799 19.70 B 1.169 1.193 29.70 C .343 .366 8.70	MAX NOTE 20.30 30.30 9.30
A .776 .799 19.70 B 1.169 1.193 29.70 C .343 .366 8.70	20.30 30.30
B 1.169 1.193 29.70 C .343 .366 8.70	30.30
C .343 .366 8.70	
<del>                                     </del>	9.30
-	0.00
D .323 .346 8.20	8.80
E .602 .622 15.30 1	15.80
F .224 .248 5.70	6.30
G .539 .563 13.70	14.30
H .657 .681 16.70	17.30
I 3.138 3.161 79.70 8	30.30
J 3.650 3.673 92.70 9	93.30
K .256 6.50	Ø
L .421 .445 10.70 1	11.30
M .815 .839 20.70 2	21.30



**Module Type** 

TYPE	VRRM	VRSM
MD36C08D1	800V	900V
MD36C12D1	1200V	1300V
MD36C16D1	1600V	1700V
MD36C18D1	1800V	1900V

## **Maximum Ratings**

Symbol	Conditions	Values	Units
I <sub>FAV</sub>	Single phase ,half wave 180 $^{\circ}$ conduction Tc=104 $^{\circ}$ C	36	Α
I <sub>FSM</sub>	t=10mS Tvj =45°C	650	Α
i <sup>2</sup> t	t=10mS Tvj =45°C	2100	A <sup>2</sup> s
Visol	a.c.50HZ;r.m.s.;1min	3000	V
Tvj		-40 to +150	$^{\circ}$
Tstg		-40 to +125	$^{\circ}$
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	1.0	°C/W
Rth(c-s)	Module	0.1	°C/W

**Electrical Characteristics** 

Symbol	Conditions	Values			Unito
		Min.	Тур.	Max.	Units
$V_{\sf FM}$	T=25°C I <sub>F</sub> =100A	_	1.25	1.40	V
I <sub>RD</sub>	Tvj=150°C V <sub>RD</sub> =V <sub>RRM</sub>	_	_	5	mA



#### **Performance Curves**

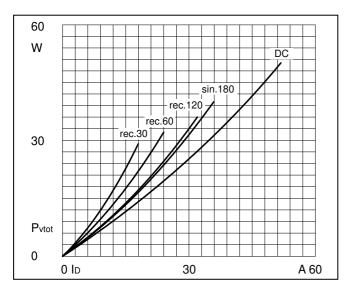


Fig1. Power dissipation

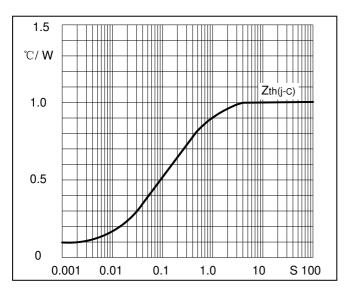


Fig3. Transient thermal impedance

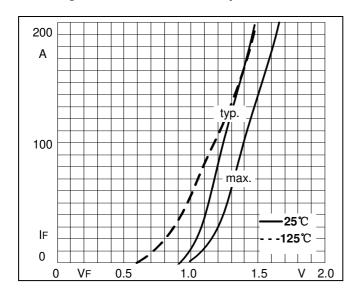
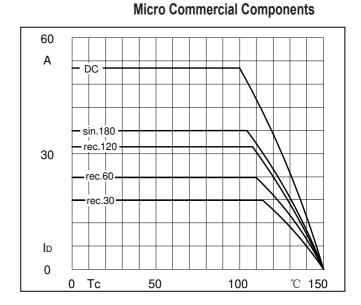


Fig5. Forward Characteristics



**Fig2.Forward Current Derating Curve** 

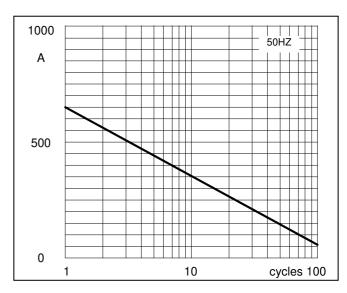


Fig4. Max Non-Repetitive Forward Surge Current

www.mccsemi.com



#### **Ordering Information:**

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

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