

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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Micro Commercial Components 20736 Marilla Street Chatsworth

CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939 MD70C08D1 MD70C12D1 MD70C16D1 MD70C18D1

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

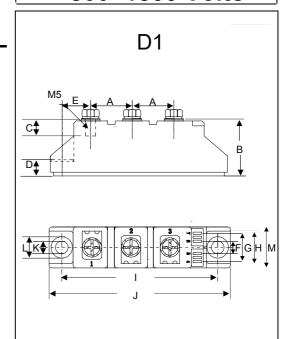
Applications

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



Circuit 1 2 3

70 Amp GLASS PASSIVATED RECTIFIER DIODE MODULES 800~1800 Volts



DIMENSIONS					
	INCHES		ММ		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.776	.799	19.70	20.30	
В	1.169	1.193	29.70	30.30	
С	.343	.366	8.70	9.30	
D	.323	.346	8.20	8.80	
Е	.602	.622	15.30	15.80	
F	.224	.248	5.70	6.30	
G	.539	.563	13.70	14.30	
Н	.657	.681	16.70	17.30	
	3.138	3.161	79.70	80.30	
J	3.650	3.673	92.70	93.30	
K	.256		6.50		Ø
L	.421	.445	10.70	11.30	
M	.815	.839	20.70	21.30	



Module Type

TYPE	VRRM	VRSM
MD70C08D1	800V	900V
MD70C12D1	1200V	1300V
MD70C16D1	1600V	1700V
MD70C18D1	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
lfav	Single phase ,half wave 180° conduction Tc=102°C	70	Α
lfsм	t=10mS Tvj =45℃	1400	Α
i ² t	t=10mS Tvj =45℃	9800	A ² s
Visol	a.c.50HZ;r.m.s.;1min	3000	V
Tvj		-40 to 150	$^{\circ}\mathbb{C}$
Tstg		-40 to 125	$^{\circ}\mathbb{C}$
Mt	T terminals(M5)	3±15%	Nm
Ms	T heatsink(M6)	5±15%	Nm
Weight	Module (Approximately)	100	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	0.51	°C/ W
Rth(c-s)	Module	0.1	°C/W

Electrical Characteristics

Cymbol	Conditions	Values			Units
Symbol		Min.	Тур.	Max.	UIIIIS
VFM	T=25℃ IF =200A	_	1.20	1.30	V
IRD	Tvj=150°C VRD=VRRM	_	_	5	m



Performance Curves

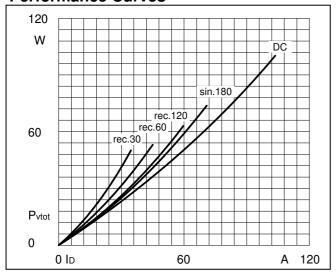


Fig1. Power dissipation

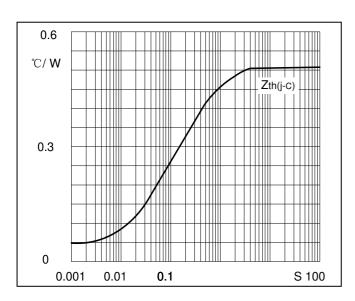


Fig3. Transient thermal impedance

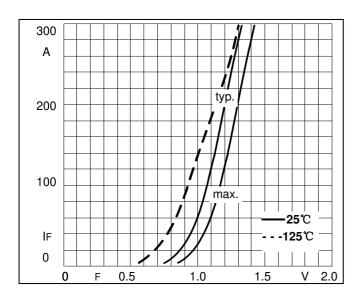


Fig5. Forward Characteristics

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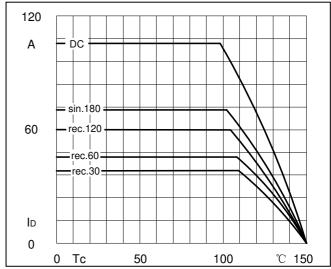


Fig2.Forward Current Derating Curve

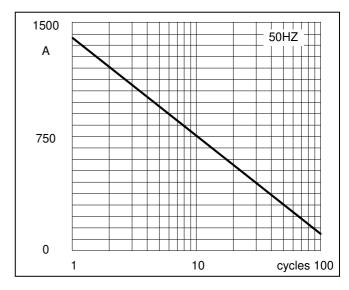


Fig4. Max Non-Repetitive Forward Surge Current



Ordering Information:

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

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