



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



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MD160S08M5
MD160S12M5
MD160S16M5
MD160S18M5

Features

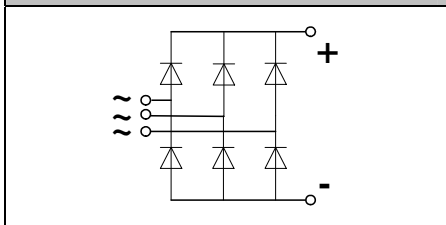
- Lead Free Finish/RoHS Compliant (NOTE 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Blocking Voltage: 800 to 1800V
- Heat transfer through aluminum oxide DBC ceramic isolated metal baseplate
- Glass passivated chip

Applications

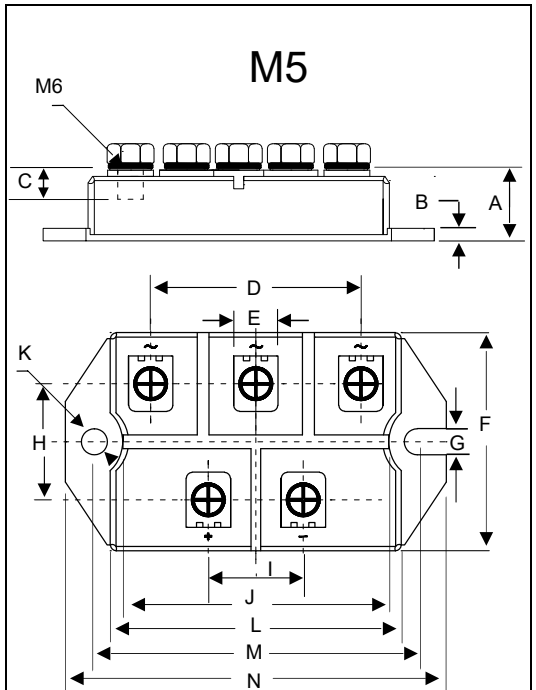
- Three phase rectifiers for power supplies
- Rectifiers for DC motor field supplies
- Battery charger rectifiers



Circuit



160 Amp
GLASS PASSIVATED
THREE PHASE
RECTIFIER BRIDGE
800~1800 Volts



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.657	.681	16.70	17.30	
B	.106	.130	2.70	3.30	
C	.264	.287	6.70	7.30	
D	2.04	2.06	51.70	52.30	
E	.461	.484	11.70	12.30	
F	2.11	2.14	53.70	54.30	
G	.244	.268	6.20	6.80	
H	1.05	1.07	26.70	27.30	
I	.972	.996	24.70	25.30	
J	2.59	2.61	65.70	66.30	
K		.256		6.50	∅
L	2.82	2.85	71.70	72.30	
M	3.14	3.16	79.70	80.30	
N	3.69	3.71	93.70	94.30	

Module Type

TYPE	VRRM	VRSM
MD160S08M5	800V	900V
MD160S12M5	1200V	1300V
MD160S16M5	1600V	1700V
MD160S18M5	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
I _D	Three phase, full wave T _c =100°C	160	A
I _{FSM}	t=10mS T _{vj} =45°C	1800	A
i ² t	t=10mS T _{vj} =45°C	16200	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)	194	g

Thermal Characteristics

Symbol	Conditions	Values	Units
R _{th(j-c)}	Per diode	0.65	°C/W
R _{th(c-s)}	Module	0.03	°C/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V _{FM}	T=25°C I _F =300A	—	1.50	1.75	V
I _{RD}	T _{vj} =25°C V _{RD} =V _{RRM} T _{vj} =150°C V _{RD} =V _{RRM}	—	—	0.5 6	mA mA

Performance Curves

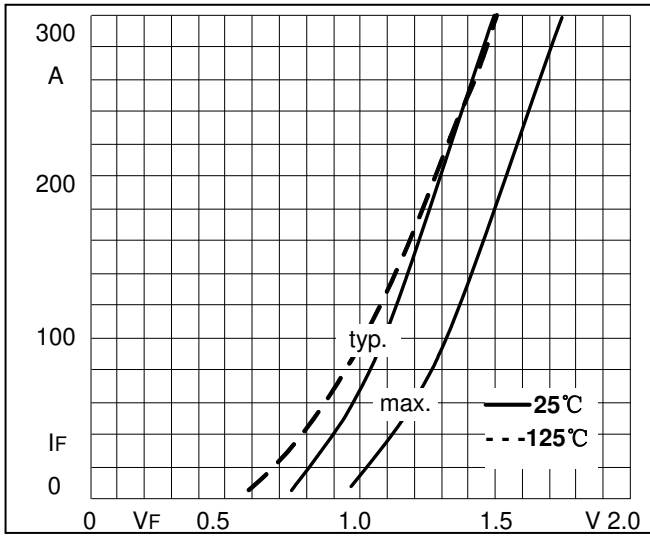


Fig1. Forward Characteristics

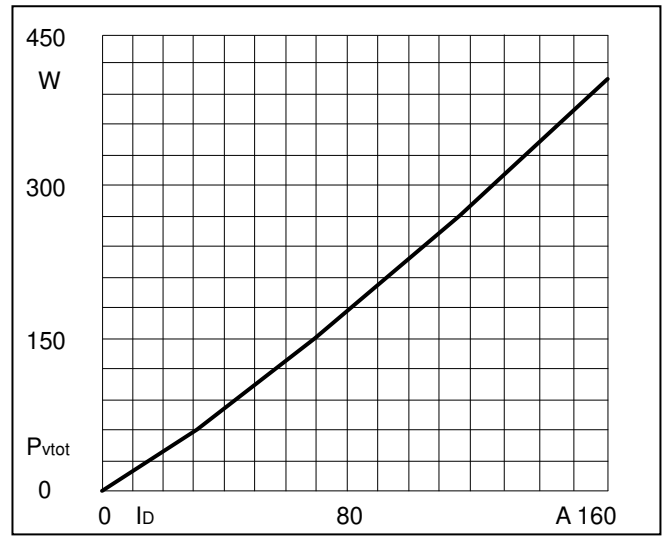


Fig2. Power dissipation

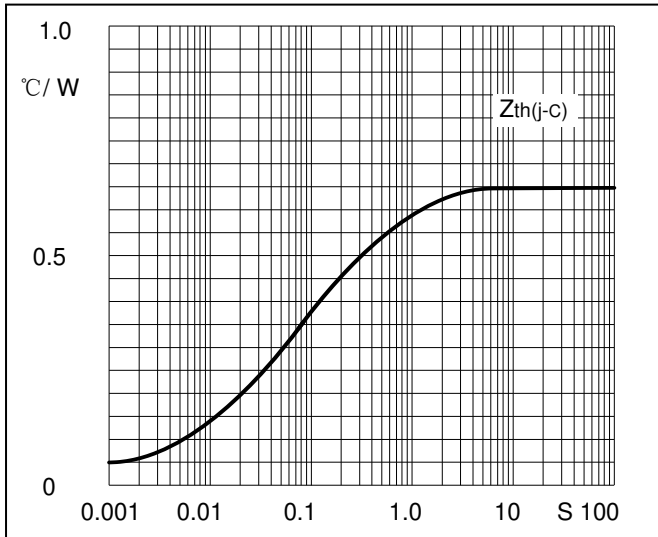


Fig3. Transient thermal impedance

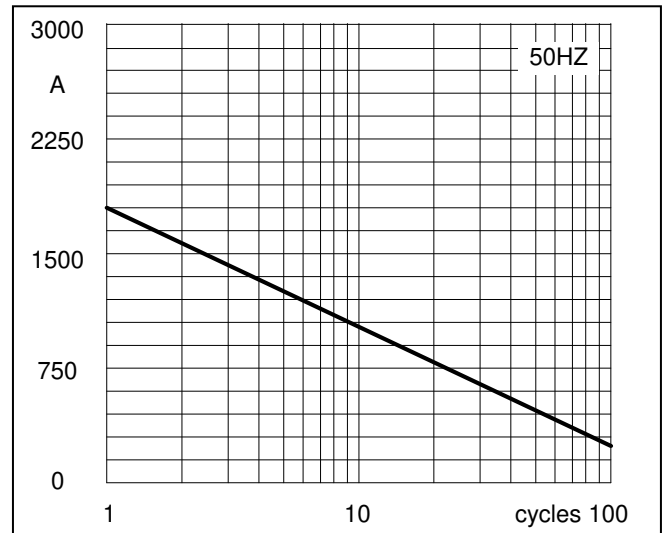


Fig4. Max Non-Repetitive Forward Surge Current

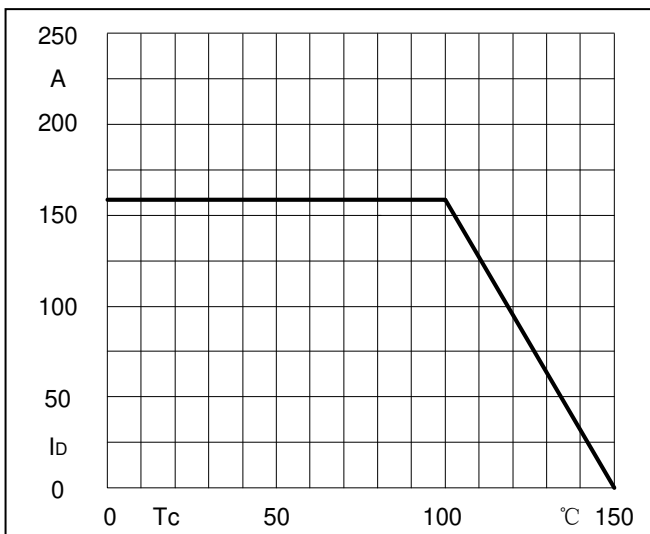


Fig5. Forward Current Derating Curve



Micro Commercial Components

Ordering Information :

Device	Packing
Part Number-BP	Bulk: 6PCS/BOX ;60PCS/CTN

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