



Micro Commercial Components 130 W Cochran St, Unit B Simi Valley, CA 93065 USA Tel:818-701-4933 MD130S08M3 MD130S12M3 MD130S16M3 MD130S18M3

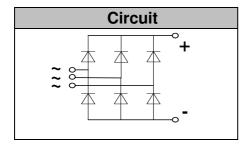
# **Features**

- 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

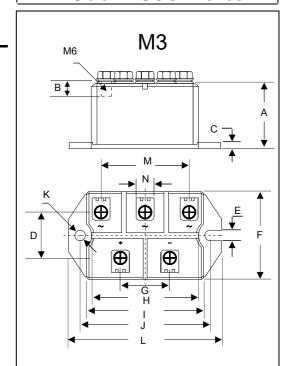
## **Applications**

- Three phase rectifiers for power supplies
- · Rectifiers for DC motor field supplies
- Input rectifiers for variable frequency drives





# 130 Amp GLASS PASSIVATED THREE PHASE RECTIFIER BRIDGE 800~1800 Volts



		DIMEN	ISIONS			
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX	NOIL	
Α	1.161	1.201	29.50	30.50		
В	0.256	0.295	6.50	7.50		
С	0.110	0.138	2.80	3.50		
D	1.043	1.083	26.50	27.50		
E	0.236	0.276	6.00	7.00		
F	2.106	2.146	53.50	54.50		
G	0.965	1.004	24.50	25.50		
Н	2.579	2.618	65.50	66.50		
	2.815	2.854	71.50	72.50		
J	3.130	3.169	79.50	80.50		
K	0.256		6.50		Ф	
L	3.681	3.720	93.50	94.50		
М	2.028	2.067	51.50	52.50		
N	0.453	0.492	11.50	12.50		



**Module Type** 

TYPE	Vrrm	Vrsm
MD130S08M3	800V	900V
MD130S12M3	1200V	1300V
MD130S16M3	1600V	1700V
MD130S18M3	1800V	1900V

**Maximum Ratings** 

Symbol	Conditions	Values	Units	
ID	Three phase, full wave Tc=100°C	130	Α	
IFSM	t=10mS Tvj =45℃	1200	Α	
i <sup>2</sup> t	t=10mS Tvj =45℃	7200	A <sup>2</sup> 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	To terminals(M6)	5±15%	Nm	
Ms	To heatsink(M6)	5±15%	Nm	
Weight	Module (Approximately)	230	g	

## **Thermal Characteristics**

Symbol	Conditions	Values	Units
Rth(j-c)	Per diode	0.90	°C/W
Rth(c-s)	Module(Approximately)	0.03	°C/W

## **Electrical Characteristics**

Symbol	Conditions	Values			Units
		Min.	Тур.	Max.	Ullits
VFM	T=25°C IF =300A	1	1.58	1.80	V
IRD	Tvj=25℃ VRD=VRRM Tvj=150℃ VRD=VRRM	_	_	0.3 5	mA mA

**Revision: A** 2 of 4 **2015/12/05** 



#### **Performance Curves**

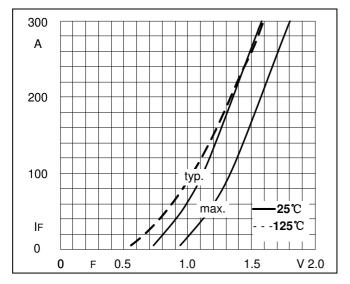


Fig1. Forward Characteristics

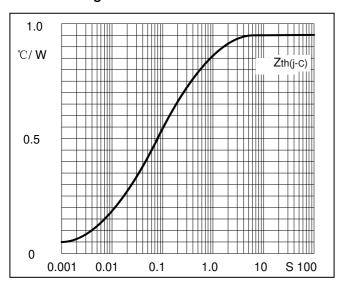
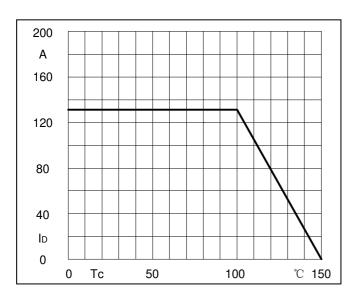


Fig3. Transient thermal impedance



**Fig5.Forward Current Derating Curve** 

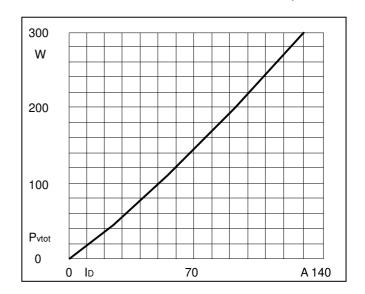


Fig2. Power dissipation

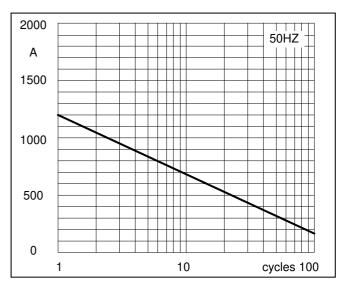


Fig4. Max Non-Repetitive Forward Surge Current

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#### **Ordering Information:**

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

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