

Micro Commercial Components



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### 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**

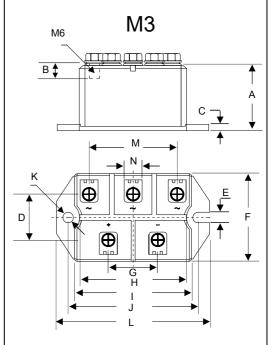
- Three phase rectifiers for power supplies
- Rectifiers for DC motor field supplies
- Input rectifiers for variable frequency drives



	Circ	uit	
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## MD130S08M3 MD130S12M3 MD130S16M3 MD130S18M3

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



DIMENSIONS				
INCHES		MM		
MIN	MAX	MIN	MAX	NOTE
1.169	1.193	29.70	30.30	
.264	.287	6.70	7.30	
.118	.130	3.00	3.30	
1.05	1.07	26.70	27.30	
.244	.268	6.20	6.80	
2.114	2.138	53.70	54.30	
.972	.996	24.70	25.30	
2.587	2.610	65.70	66.30	
2.823	2.846	71.70	72.30	
3.138	3.161	79.70	80.30	
		6.50		Ø
3.689	3.713	93.70	94.30	
2.035	2.059	51.70	52.30	
.460	.484	11.70	12.30	
	MIN 1.169 .264 .118 1.05 .244 2.114 .972 2.587 2.823 3.138 .256 3.689 2.035	INCHES   MIN MAX   1.169 1.193   .264 .287   .118 .130   1.05 1.07   .244 .268   2.114 2.138   .972 .996   2.587 2.610   2.823 2.846   3.138 3.161   .256 3.689   3.713 2.035	INCHES MM   MIN MAX MIN   1.169 1.193 29.70   .264 .287 6.70   .118 .130 3.00   1.05 1.07 26.70   .244 .268 6.20   2.114 2.138 53.70   .972 .996 24.70   2.587 2.610 65.70   2.823 2.846 71.70   3.138 3.161 79.70   .256 6 6   .689 3.713 93.70   2.035 2.059 51.70	INCHES MM   MIN MAX MIN MAX   1.169 1.193 29.70 30.30   .264 287 6.70 7.30   .118 .130 3.00 3.30   1.05 1.07 26.70 27.30   .244 .268 6.20 6.80   2.114 2.138 53.70 54.30   .972 .996 24.70 25.30   2.587 2.610 65.70 66.30   2.823 2.846 71.70 72.30   .3138 .3.161 79.70 80.30   .256 6.50 5.50   .3.689 3.713 93.70 94.30   2.035 2.059 51.70 52.30

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#### Module Type

ТҮРЕ	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℃	130	А
IFSM	t=10mS Tvj =45℃	1200	А
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	°C
Tstg		-40 to +125	°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

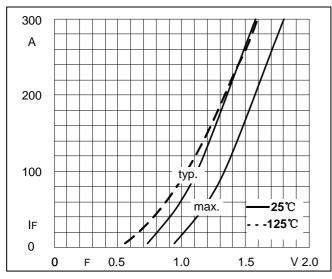
#### **Electrical Characteristics**

Symbol	Conditions	Values			Units
		Min.	Тур.	Max.	Units
Vfm	T=25℃ IF =300A	_	1.58	1.80	V
Ird	Tvj=25℃ VRD=VRRM Tvj=150℃ VRD=VRRM	_	_	0.3 5	mA mA

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#### **Performance Curves**



**Fig1. Forward Characteristics** 

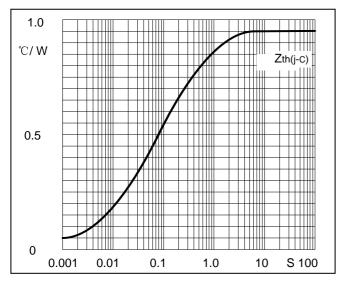


Fig3. Transient thermal impedance

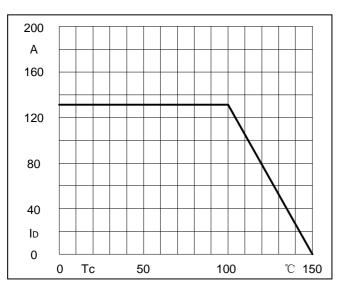


Fig5.Forward Current Derating Curve

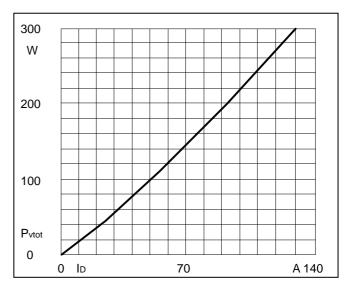


Fig2. Power dissipation

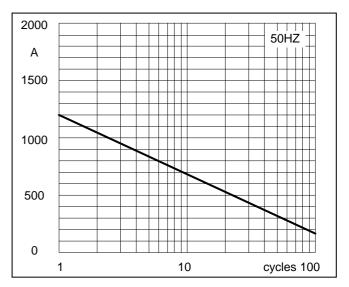


Fig4. Max Non-Repetitive Forward Surge Current

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#### **Revision:** A



#### **Ordering Information :**

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

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