

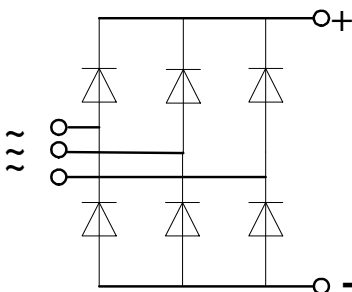
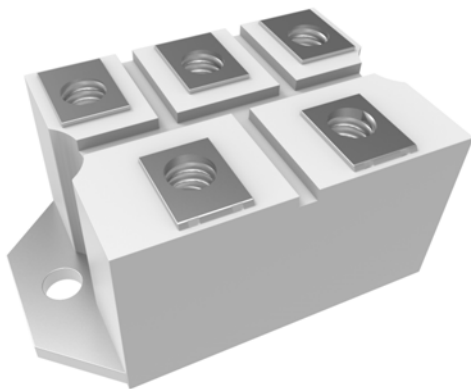
**Features**

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Heat Transfer Through Aluminum Oxide DBC Ceramic Isolated Metal Baseplate
- Blocking voltage:1600V
- Glass passivated chip

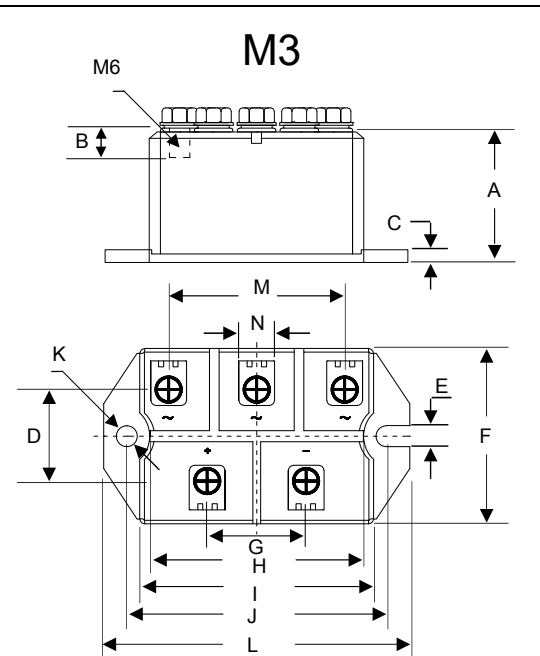
**Applications**

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

MCC Part Number	$V_{RRM}$	$V_{RSM}$
MD100S16M3	1600V	1700V



**100 Amp  
GLASS PASSIVATED  
THREE PHASE  
RECTIFIER BRIDGE  
1600 Volts**



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.165	1.213	29.60	30.80	
B	0.236	0.315	6.00	8.00	
C	0.098	0.138	2.50	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	
H	2.579	2.618	65.50	66.50	
I	2.815	2.854	71.50	72.50	
J	3.130	3.169	79.50	80.50	
K	0.256		6.50		φ
L	3.681	3.720	93.50	94.50	
M	2.028	2.067	51.50	52.50	
N	0.453	0.492	11.50	12.50	

### Maximum Ratings

Symbol	Conditions	Values	Units
ID	Three phase, full wave Tc=100°C	100	A
IFSM	t=10mS Tvj =45°C	920	A
i <sup>2</sup> t	t=10mS Tvj =45°C	4200	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

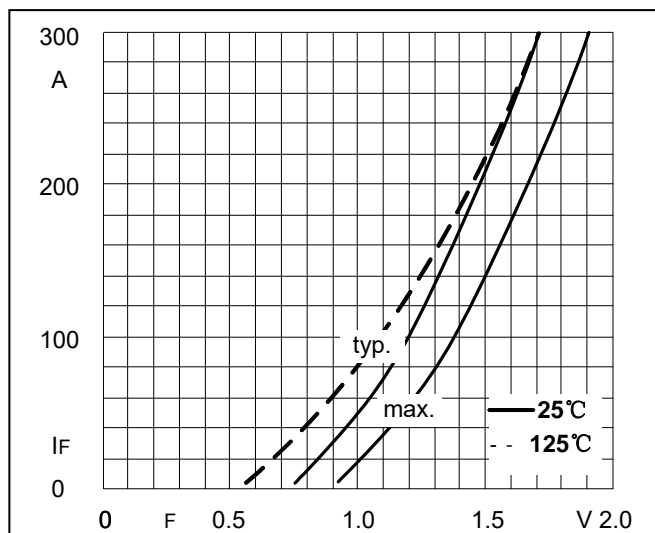
### Thermal Characteristics

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

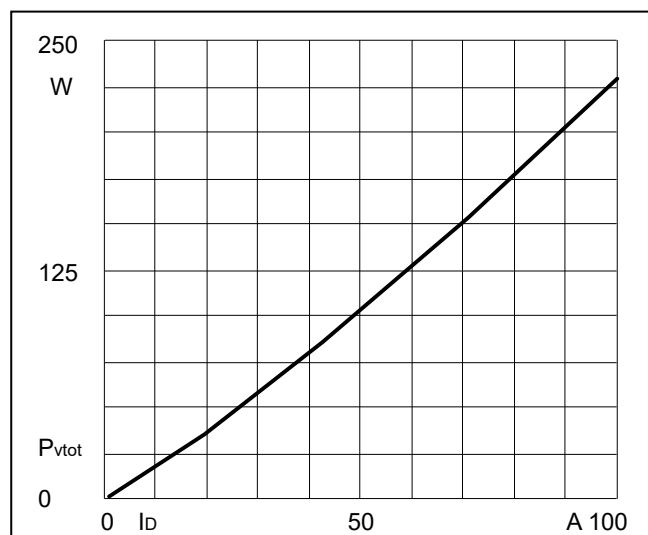
### Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V <sub>FM</sub>	T=25°C I <sub>F</sub> =300A	—	1.70	1.90	V
I <sub>RD</sub>	Tvj=25°C VRD=VRRM Tvj=150°C VRD=VRRM	—	—	0.3 5	mA mA

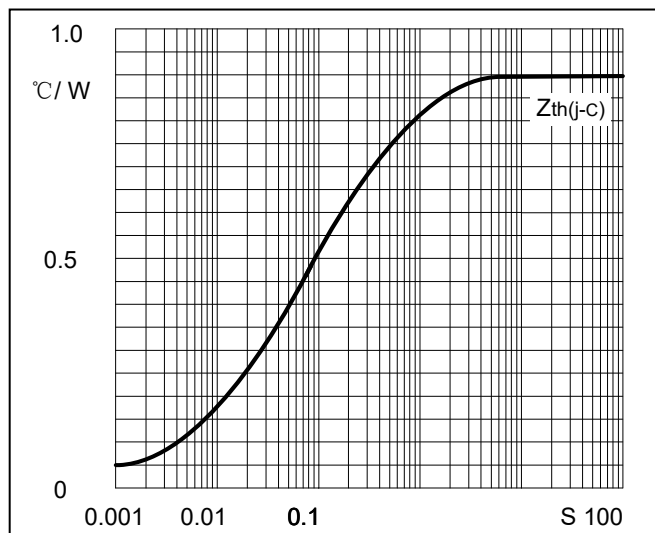
**Performance Curves**



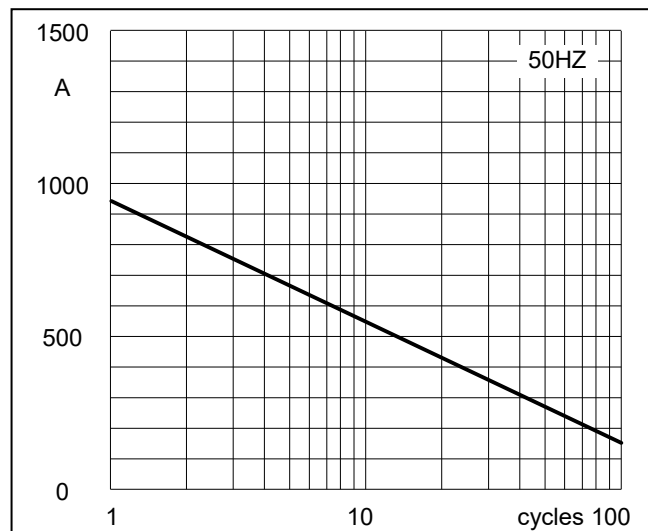
**Fig1. Forward Characteristics**



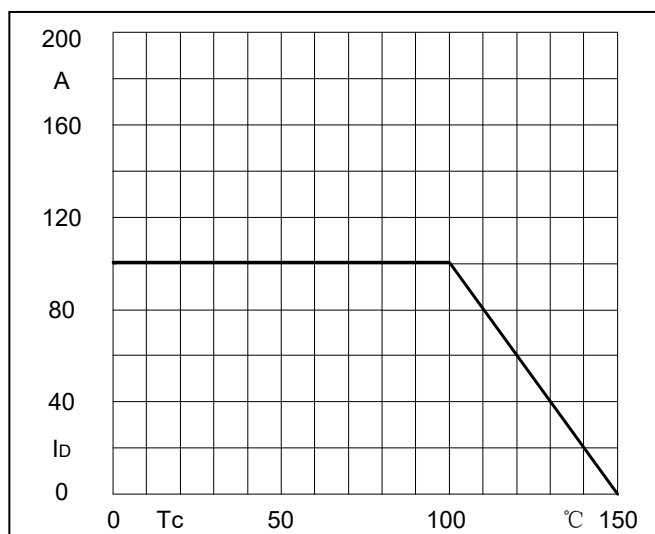
**Fig2. Power dissipation**



**Fig3. Transient thermal impedance**



**Fig4. Max Non-Repetitive Forward Surge Current**



**Fig5. Forward Current Derating Curve**

## Ordering Information

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

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