

Features

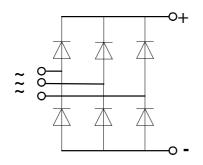
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Heat Transfer Through Aluminum Oxide DBC Ceramic Isolated Metal Baseplate
- Blocking voltage:1600V
- · Glass passivated chip

Applications

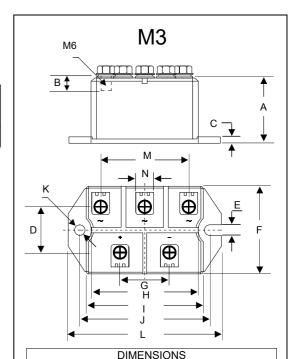
- Three phase rectifiers for power supplies
- Rectifiers for DC motor field supplies
- · Battery charger rectifiers

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





100 Amp GLASS PASSIVATED THREE PHASE RECTIFIER BRIDGE 1600 Volts



DIMENSIONS						
DIM	INC	HES	MM		NOTE	
DIIVI	MIN	MAX	MIN	MAX	NOIL	
Α	1.165	1.213	29.60	30.80		
В	0.236	0.315	6.00	8.00		
С	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		
Н	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	0.2	0.256		6.50		
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		



Maximum Ratings

Symbol	Conditions	Values	Units
ID	Three phase, full wave Tc=100℃	100	Α
IFSM	t=10mS Tvj =45℃	920	Α
i ² t	t=10mS Tvj =45℃	4200	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	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			Unito
Symbol		Min.	Тур.	Max.	Units
VFM	T=25℃ IF =300A	_	1.70	1.90	V
IRD	Tvj=25℃ VRD=VRRM Tvj=150℃ VRD=VRRM	_	_	0.3 5	mA mA



Performance Curves

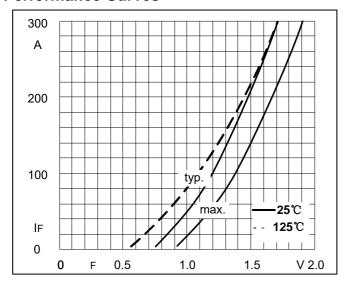


Fig1. Forward Characteristics

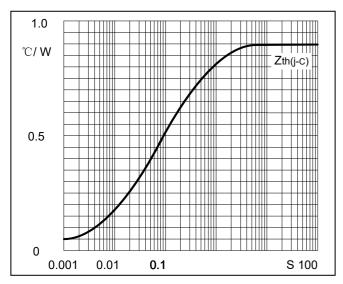


Fig3. Transient thermal impedance

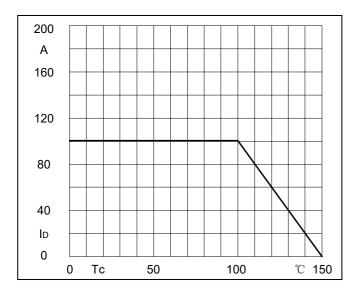


Fig5.Forward Current Derating Curve

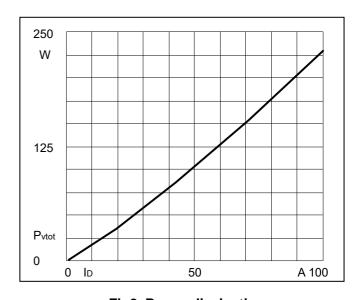


Fig2. Power dissipation

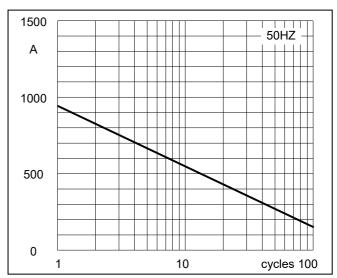


Fig4. Max Non-Repetitive Forward Surge Current



Ordering Information

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

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