



MDS100

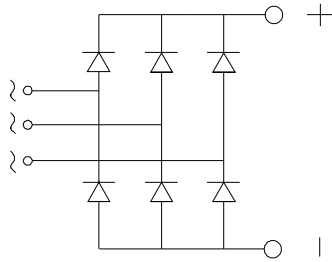


Three Phase Rectifier Bridge

VRRM 800 to 1800V
ID 100Amp

Applications

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



Features

- Three phase bridge rectifier
- Blocking voltage: 800 to 1800V

Module Type

TYPE	VRRM	VRSM
MDS100-08	800V	900V
MDS100-12	1200V	1300V
MDS100-16	1600V	1700V
MDS100-18	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
I_D	$T_c=100^\circ\text{C}$	100	A
IFSM	$T_{vj}=45^\circ\text{C}$ $t=10\text{ms}$ (50HZ), sine	920	A
i^2t	$T_{vj}=45^\circ\text{C}$ $t=10\text{ms}$ (50HZ), sine	4200	A^2S
Viso	a.c.50HZ;r.m.s.;1min	2500	V
T_{vj}		-40 to 150	$^\circ\text{C}$
T_{stg}		-40 to 125	$^\circ\text{C}$
Weight	Module (Approximately)	220	g

Thermal Characteristics

Symbol	Conditions	Values	Units
$R_{th(j-c)}$	Per module	0.32	$^\circ\text{C}/\text{W}$

Electrical Characteristics

Symbol	Conditions	Values	Units
VFM	$T=25^\circ\text{C}$ IFM=300A	1.90	V
IRD	$T_{vj}=25^\circ\text{C}$ VRD=VRRM	≤ 0.5	mA
	$T_{vj}=150^\circ\text{C}$ VRD=VRRM	≤ 5	mA



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Performance Curves

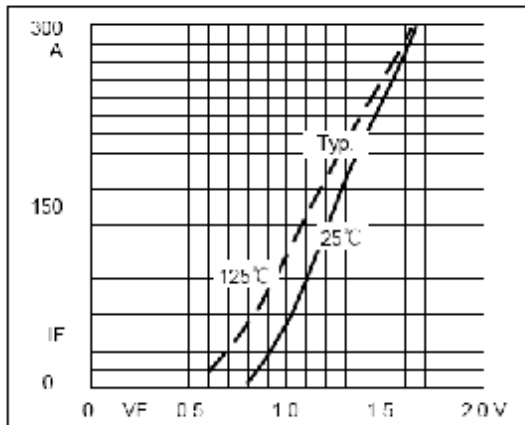


Fig1. Forward Characteristics

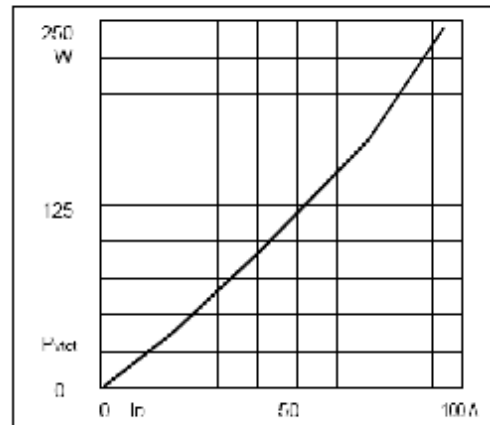


Fig2. Power dissipation

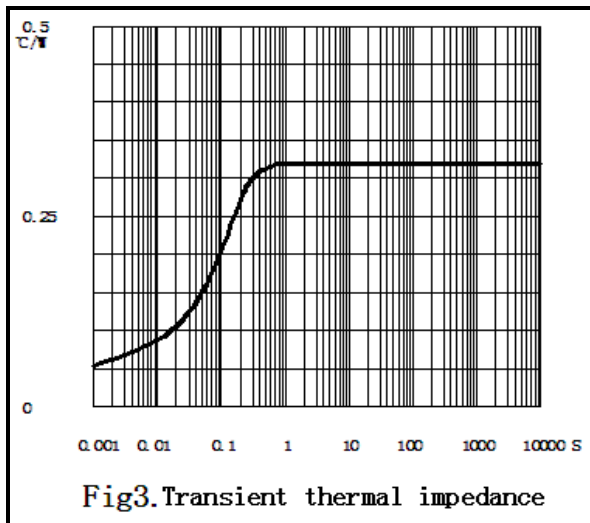


Fig3. Transient thermal impedance

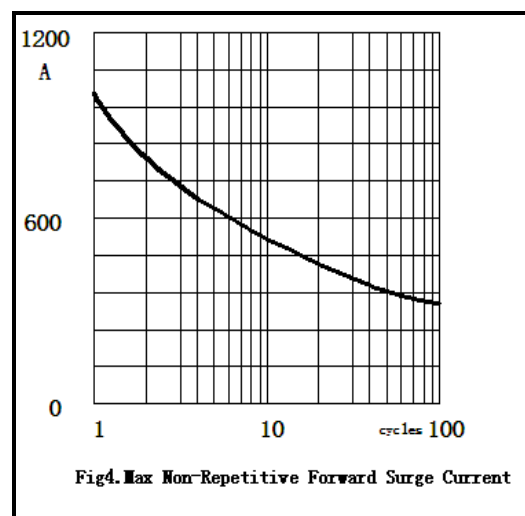


Fig4. Max Non-Repetitive Forward Surge Current

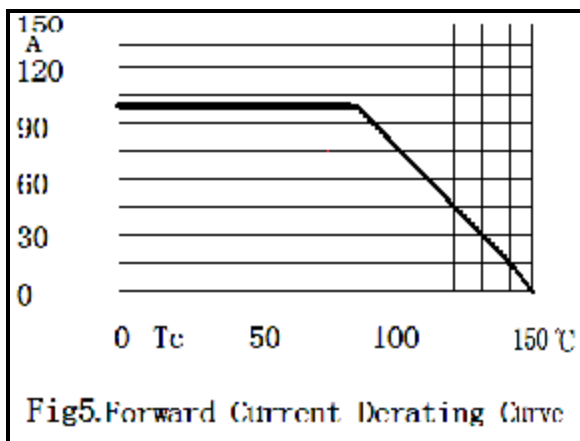
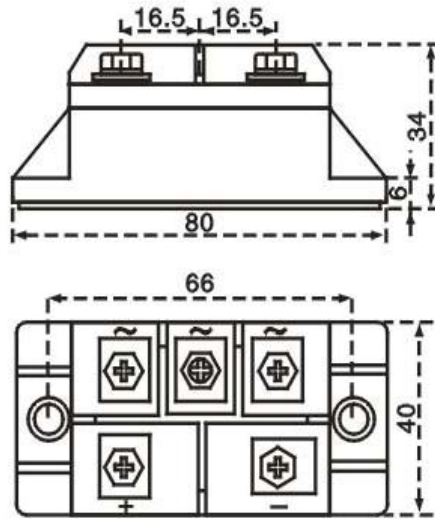


Fig5. Forward Current Derating Curve



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Dimensions in mm