



# MDQ100



## Single Phase Rectifier Bridge

**VRRM** 800 to 1800V

**ID** 100Amp

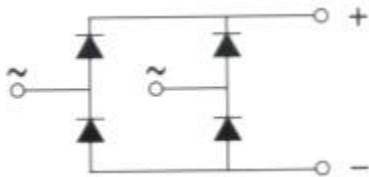
### Applications

Single phase rectifiers for power supplies

Rectifiers for DC motor field supplies

Battery charger rectifiers

Input rectifiers for variable frequency drives



### Featu

Single phase bridge rectifier

Blocking voltage:800 to 1800V

### Module Type

TYPE	VRRM	VRSM
MDQ100-08	800V	900V
MDQ100-12	1200V	1300V
MDQ100-16	1600V	1700V
MDQ100-18	1800V	1900V

### Maximum Ratings

Symbol	Conditions	Values	Units
ID	Tc=85°C	100	A
IFSM	Tvj=45°C t=10ms (50HZ), sine	920	A
i <sup>2</sup> t	Tvj=45°C t=10ms (50HZ), sine	4200	A <sup>2</sup> S
Viso	a.c.50HZ;r.m.s.;1min	2500	V
Tvj		-40 to 150	°C
Tstg		-40 to 125	°C
Weight	Module (Approximately)	200	g

### Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Per module	0.30	°C/W

### Electrical Characteristics

Symbol	Conditions	Values	Units
VFM	T=25°C IFM=300A	1.90	V
IRD	Tvj=25°C VRD=VRRM	≤0.5	mA
	Tvj=150°C VRD=VRRM	≤5	mA



# MDQ100

## Performance Curves

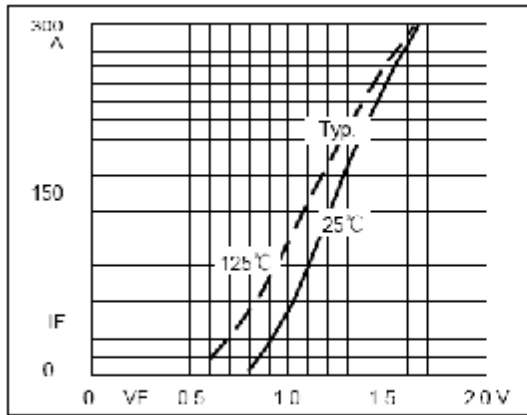


Fig1. Forward Characteristics

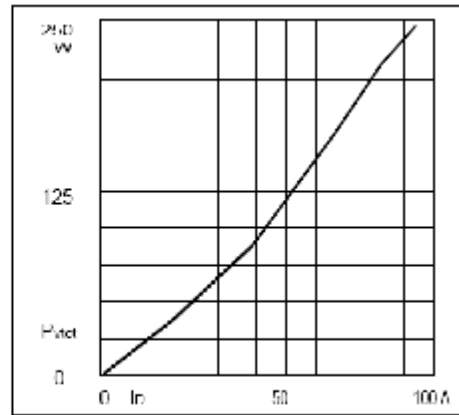
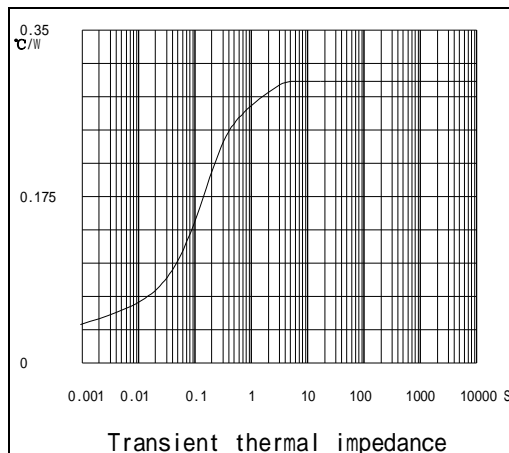
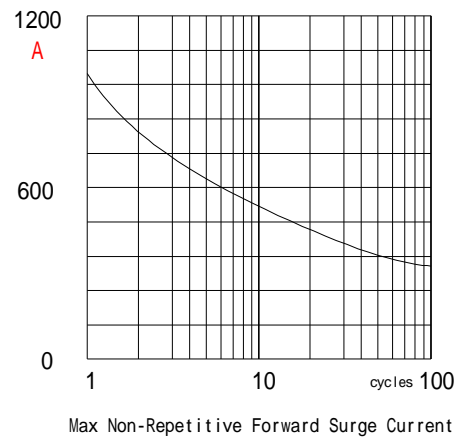


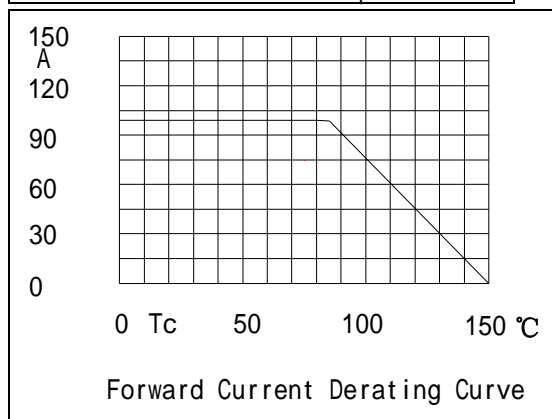
Fig2. Power dissipation



Transient thermal impedance



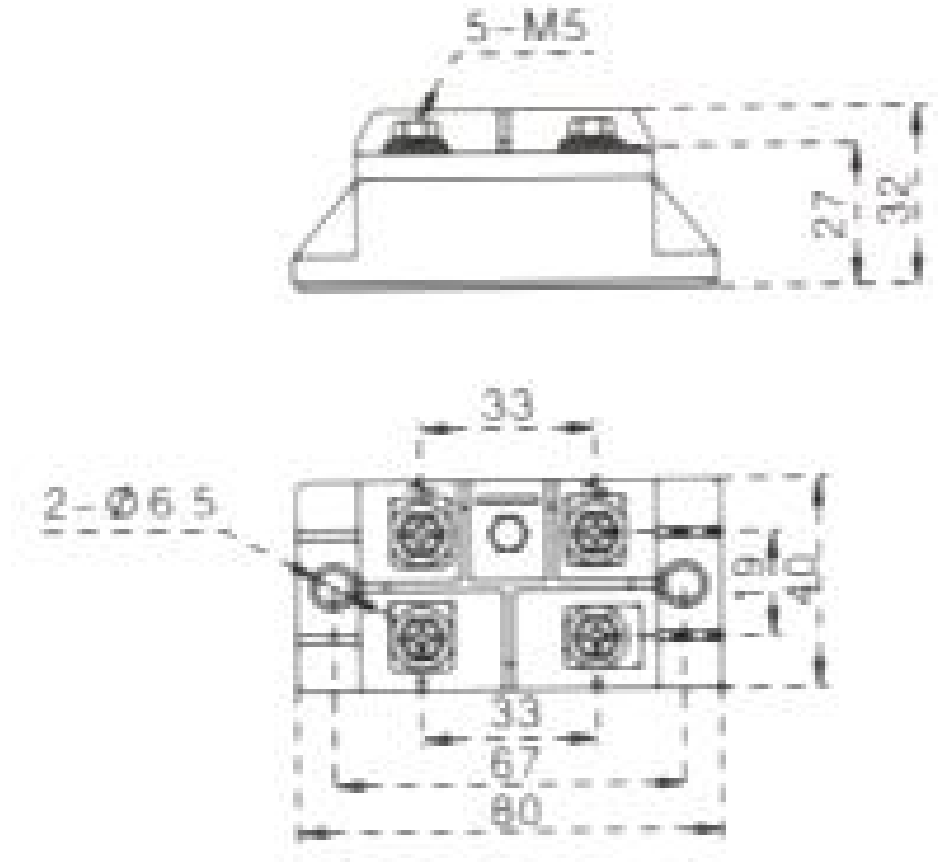
Max Non-Repetitive Forward Surge Current



Forward Current Derating Curve



# MDQ100



Dimensions in mm