

MDQ100



Single Phase Rectifier Bridge

VRRM 800 to 1800V

ID 100Amp

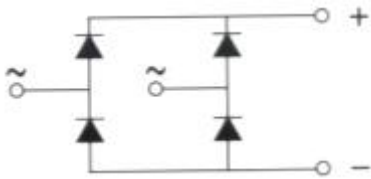
Applications

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 ² t	Tvj=45°C t=10ms (50HZ), sine	4200	A ² 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

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Performance Curves

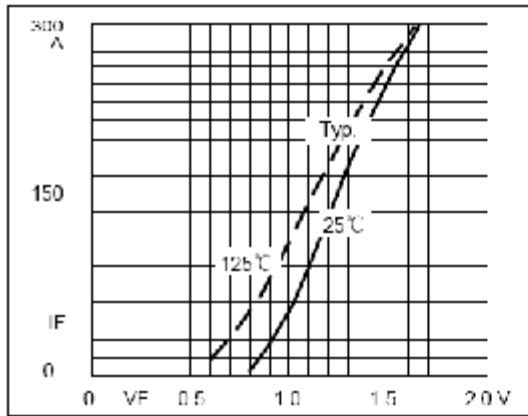


Fig1. Forward Characteristics

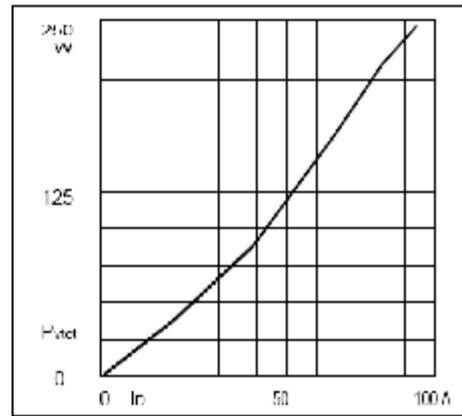
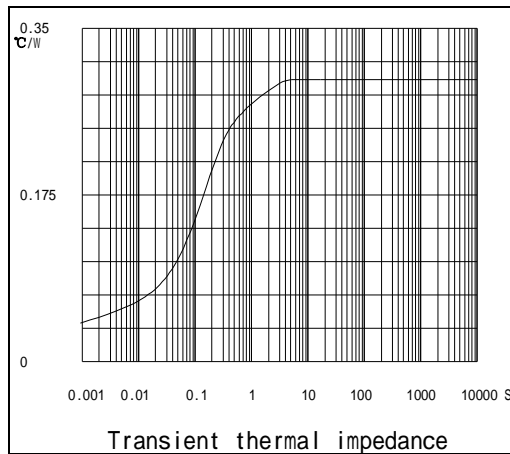
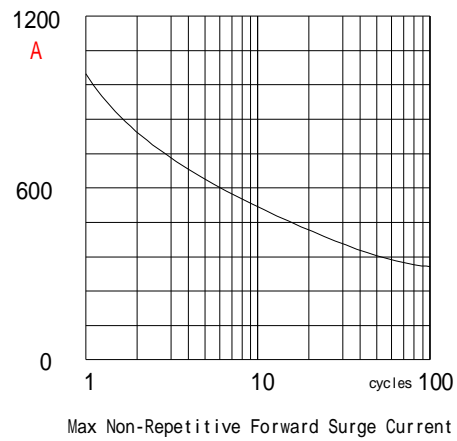


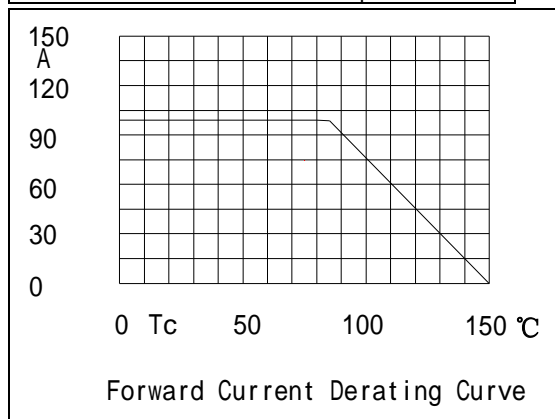
Fig2. Power dissipation



Transient thermal impedance

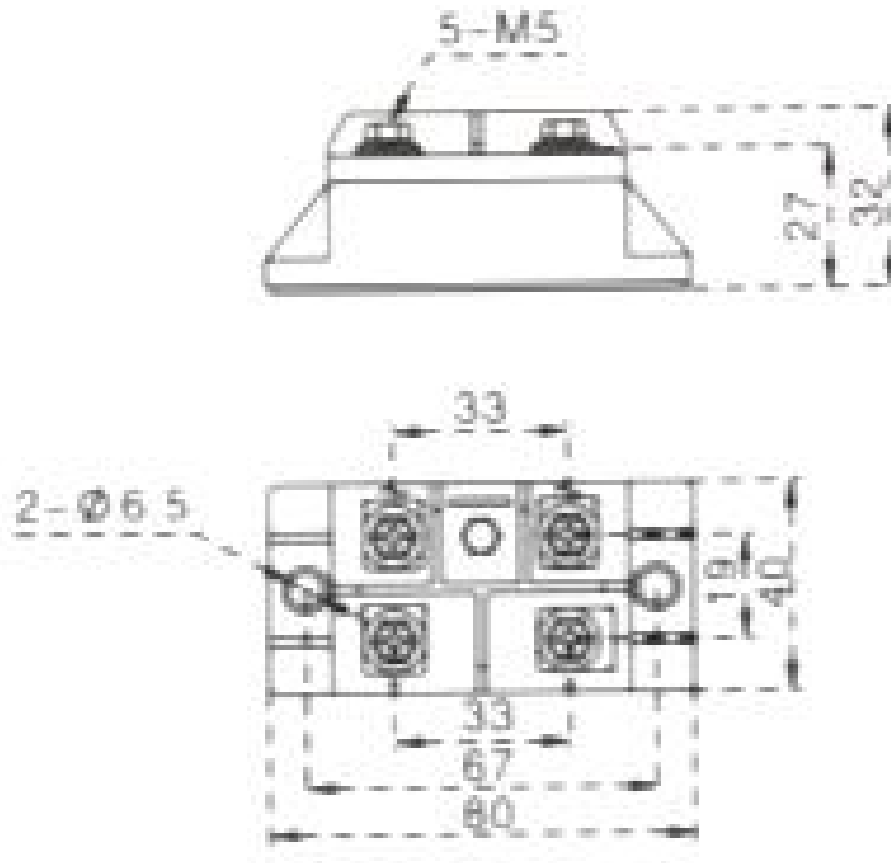


Max Non-Repetitive Forward Surge Current



Forward Current Derating Curve

MDQ100



Dimensions in mm