

CURRENT 100 Ampere  
 VOLTAGE RANG 800 to 1800 Volts

**MDQ100-08 THRU MDQ100-18**

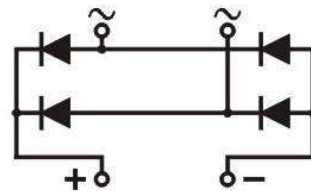
**Applications**

- 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
$I_D$	$T_c=85$	50/60/75/90/100	A
$I_{FSM}$	$T_{vj}=45$ t=10ms (50HZ), sine	920	A
$i^2t$	$T_{vj}=45$ t=10ms (50HZ), sine	4200	A <sup>2</sup> S
Viso	a.c.50HZ;r.m.s.;1 min	2500	V
$T_{vj}$		-40 to 150	
$T_{stg}$		-40 to 125	
Weight	Module (Approximately)	200	g

**Thermal Characteristics**

Symbol	Conditions	Values	Units
$R_{th(j-c)}$	Per module	0.30	/W

**Electrical Characteristics**

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

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RATING AND CHARACTERISTIC CURVES MDQ100-08 Thru MDQ100-18

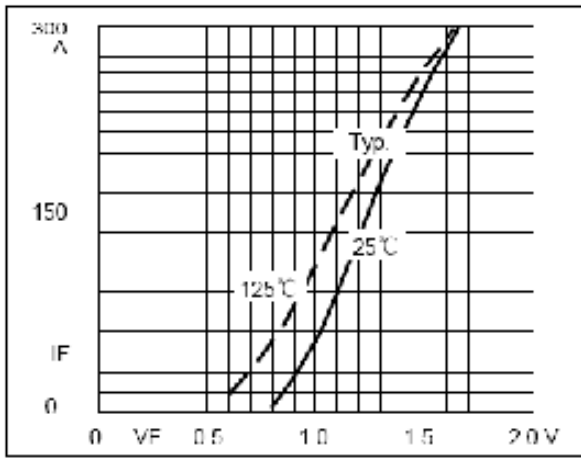


Fig1. Forward Characteristics

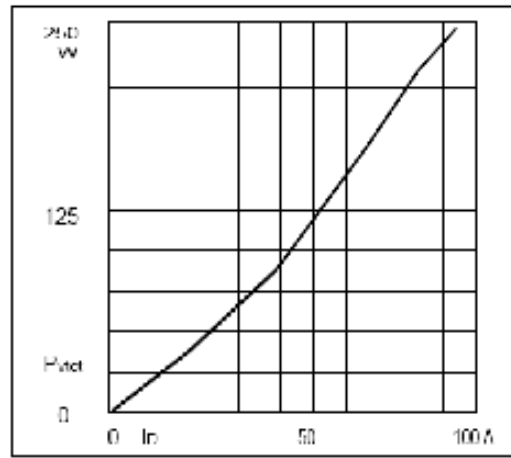
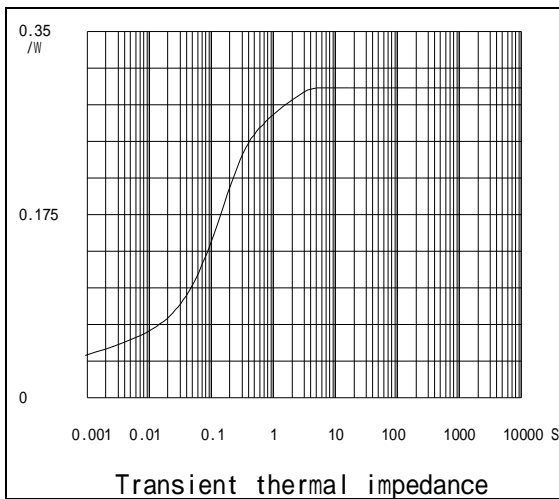
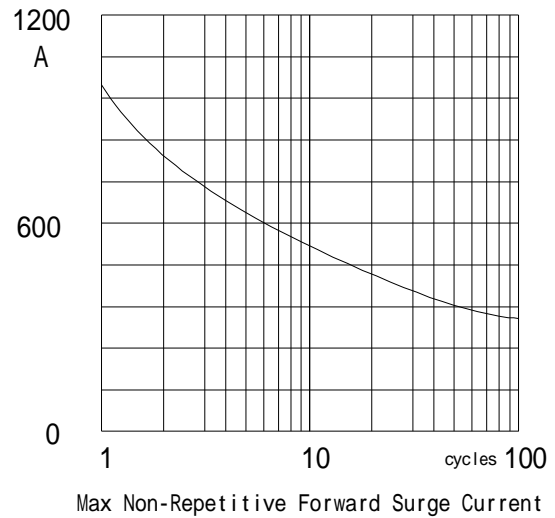


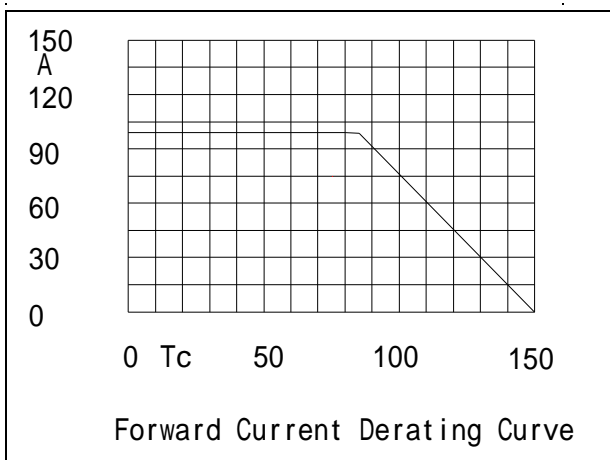
Fig2. Power dissipation



Transient thermal impedance



Max Non-Repetitive Forward Surge Current



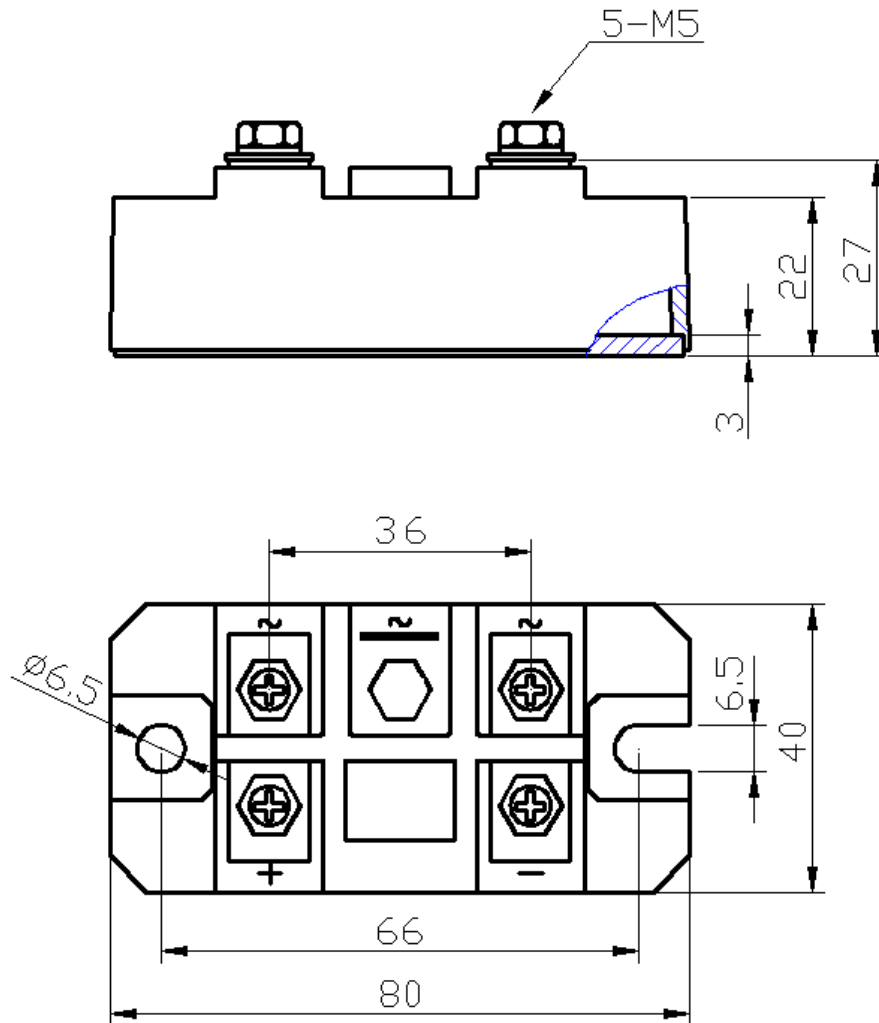
Forward Current Derating Curve

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**Package Outline Information**

**CASE: M18**



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**MDQ100-08 THRU MDQ100-18**

**Package Outline Information**

**CASE: M15**

