



MDQ75



Single Phase Rectifier Bridge

VRRM 800 to 1800V

ID 75Amp

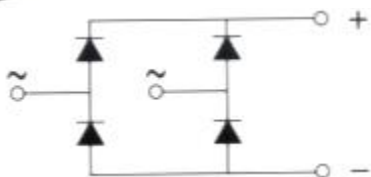
Applications

Single phase rectifiers for power supplies

Rectifiers for DC motor field supplies

Battery charger rectifiers

Input rectifiers for variable frequency drives



Features

Single phase bridge rectifier

Blocking voltage:800 to 1800V

Module Type

TYPE	VRRM	VRSM
MDQ75-08	800V	900V
MDQ75-12	1200V	1300V
MDQ75-16	1600V	1700V
MDQ75-18	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
I_D	$T_c=85^{\circ}\text{C}$	75	A
I_{FSM}	$T_{vj}=45^{\circ}\text{C}$ $t=10\text{ms}$ (50HZ), sine	750	A
i^2t	$T_{vj}=45^{\circ}\text{C}$ $t=10\text{ms}$ (50HZ), sine	2800	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)	200	g

Thermal Characteristics

Symbol	Conditions	Values	Units
$R_{th(j-c)}$	Per module	0.40	$^{\circ}\text{C}/\text{W}$

Electrical Characteristics

Symbol	Conditions	Values	Units
VFM	$T=25^{\circ}\text{C}$ $I_{FM}=120\text{A}$	1.45	V
IRD	$T_{vj}=25^{\circ}\text{C}$ $V_{RD}=V_{RRM}$	≤ 0.5	mA
	$T_{vj}=150^{\circ}\text{C}$ $V_{RD}=V_{RRM}$	≤ 5	mA



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Performance Curves

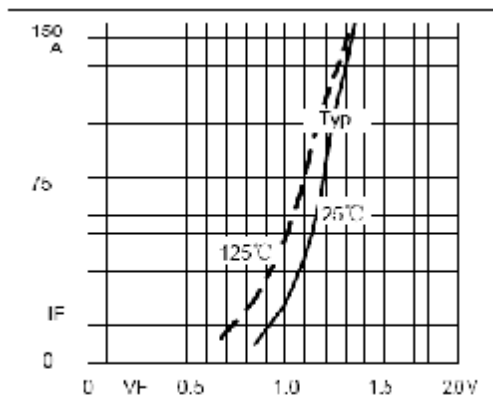


Fig1. Forward Characteristics

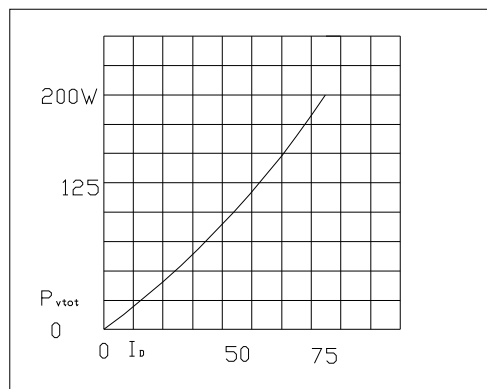
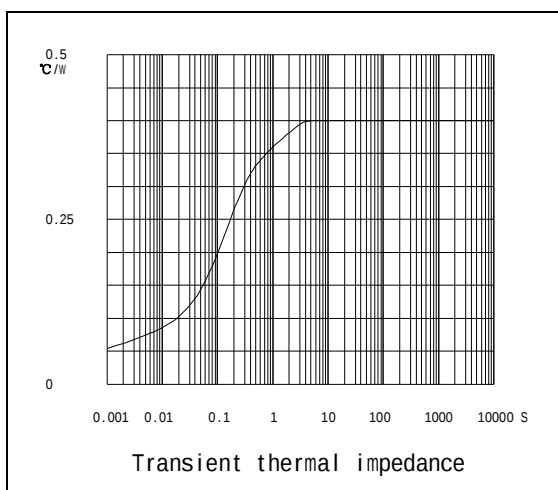
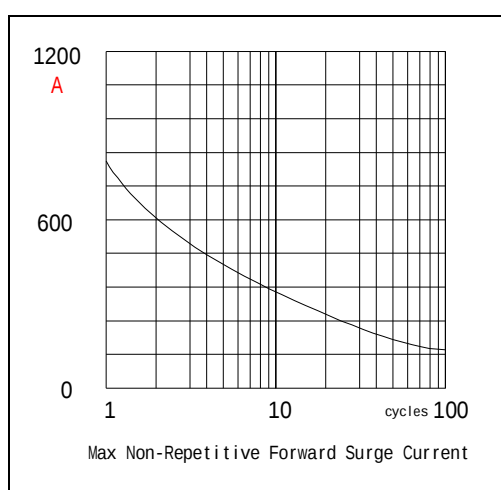


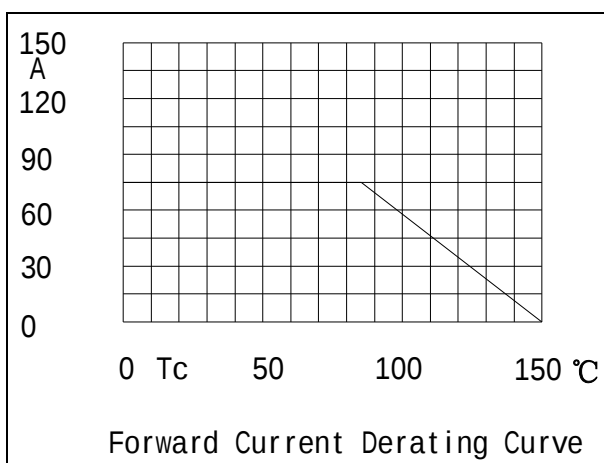
Fig2. Power dissipation



Transient thermal impedance



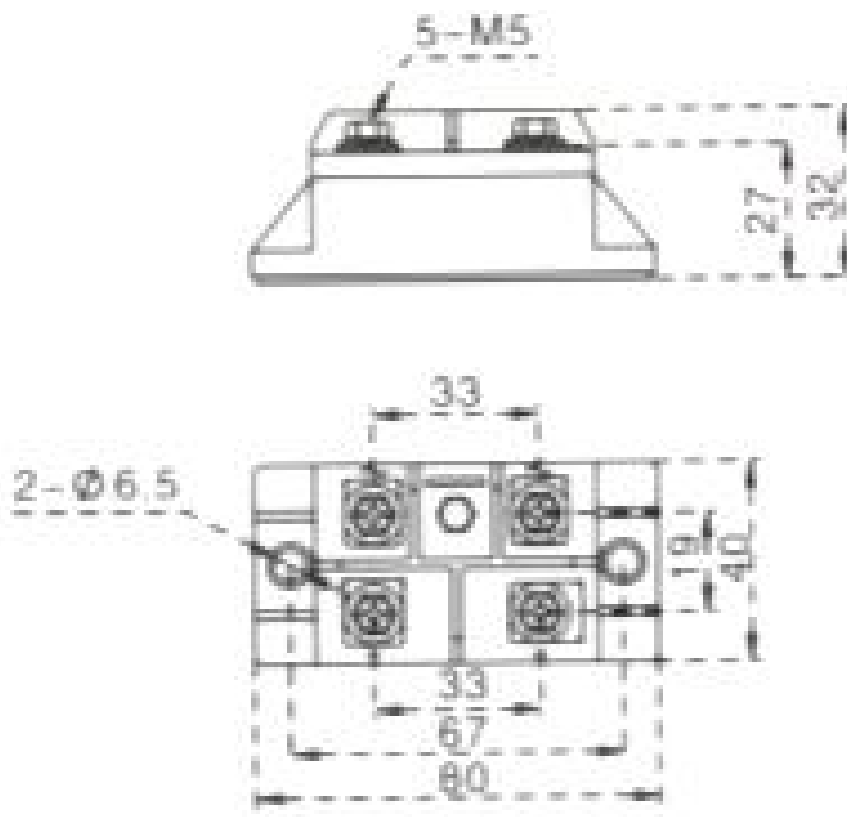
Max Non-Repetitive Forward Surge Current



Forward Current Derating Curve



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Dimensions in mm