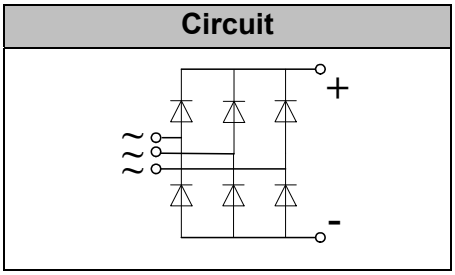


Glass Passivated Three Phase Rectifier Bridge

V_{RRM} 2000V
I_D 145A

Circuit



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:2000V
- Isolated heatsink using DBC technology
- Glass passivated chip

Module Type

TYPE	VRRM	VRSM
MD145S20N6	2000V	2100V

Maximum Ratings

Symbol	Conditions	Values	Units
I_D	Three phase, full wave Tc=80℃	145	A
I_{FSM}	t=10mS Ta =25℃	1800	A
i^2t	t=10mS Ta =25℃	16200	A^2s
Visol	a.c.50HZ;r.m.s.;1min	3000	V
Tvj		-40 to +150	℃
Tstg		-40 to +125	℃
Mt	To terminals(M4)	2.5±15%	Nm
Ms	To heatsink(M4)	2.5±15%	Nm
Weight	Module (Approximately)	75	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	Per Diode	0.70	℃/W
Rth(j-c)	Per Module	0.12	℃/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
VFM	T=25℃ IF =145A	—	1.7	1.95	V

Performance Curves

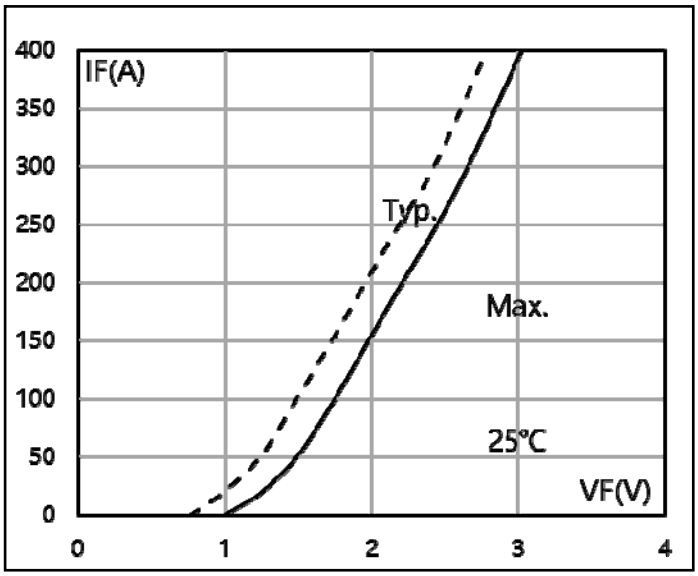


Fig1. Forward Characteristics

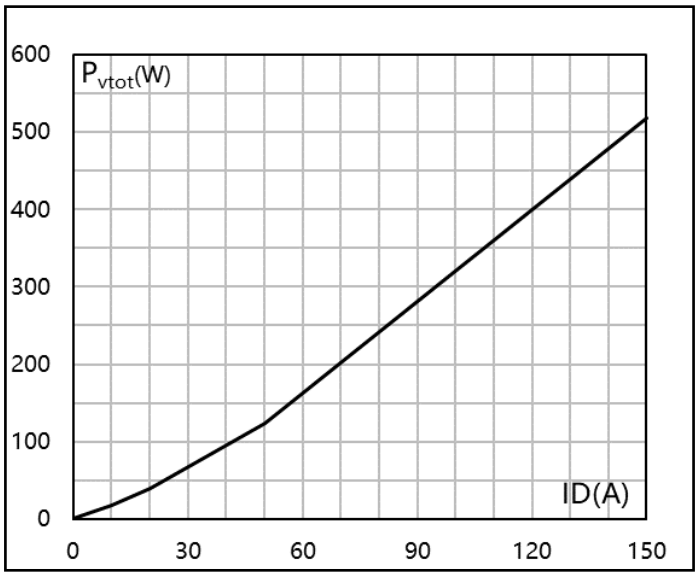


Fig2. Power dissipation

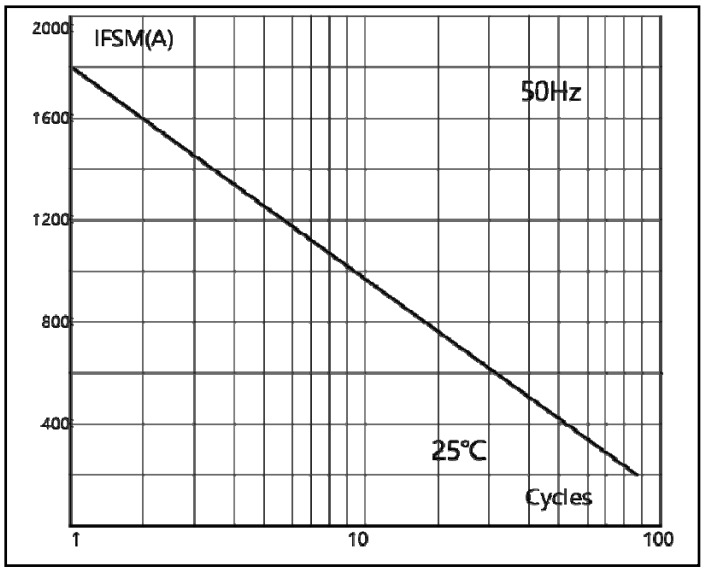


Fig3. Max Non-Repetitive Forward Surge Current

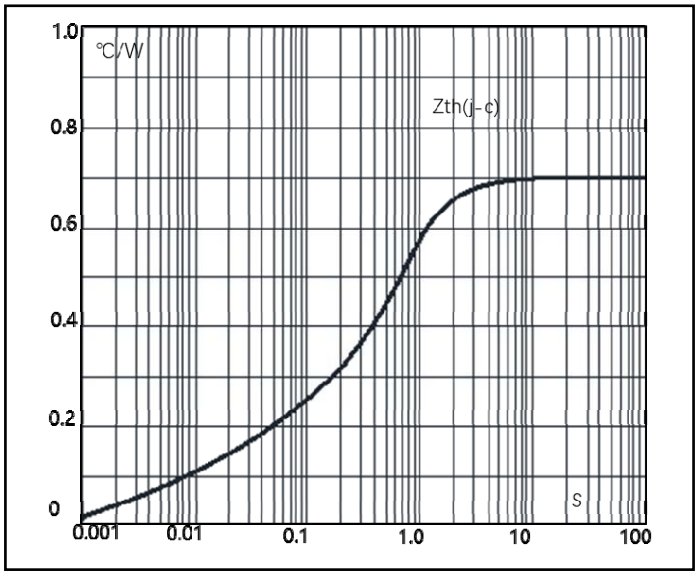
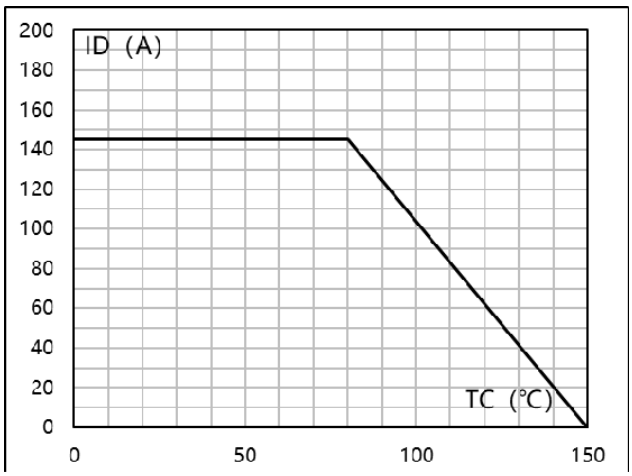
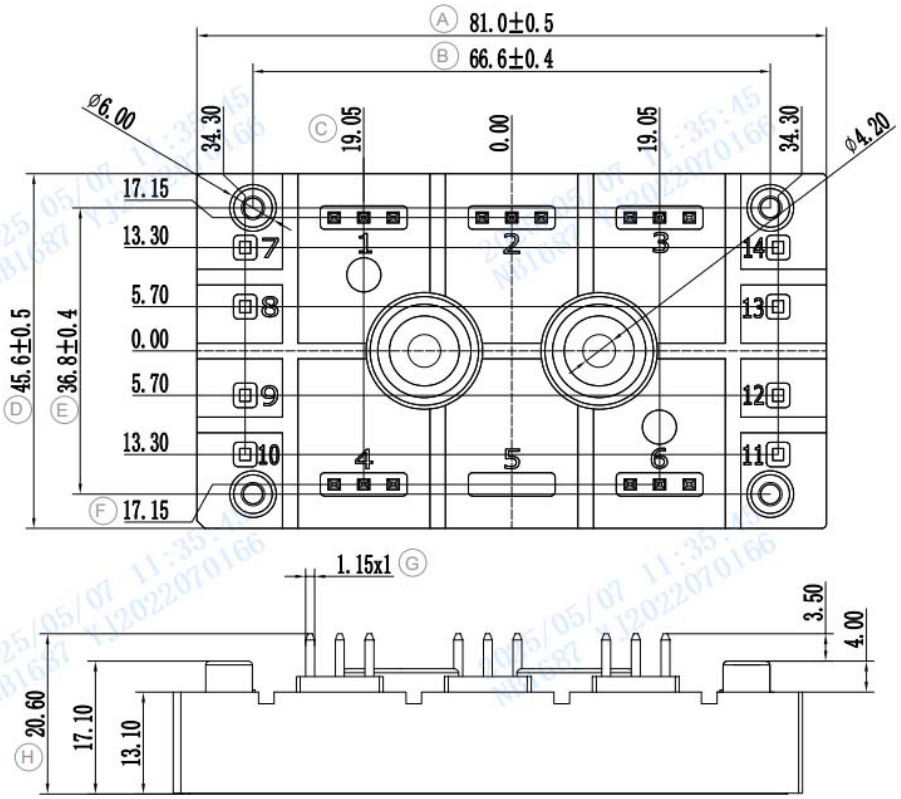


Fig4. Transient thermal impedance



CASE：N6



Dim	Min	Max
A	80.5	81.5
B	66.2	67.0
C	18.85	19.25
D	45.1	46.1
E	36.4	37.2
F	16.95	17.35
G	1.05x0.90	1.25x1.10
H	20.2	21.0

Dimensions in mm

Packing Standard

Item	Length: A (mm)	Width: B (mm)	Height: C (mm)	Quantity (PCS)
Inner Box	385	276	26	24
Outer Carton	395	280	260	192

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