



Rectifier Diode Module

VRRM 1200 to 2000V

IFAV 330A

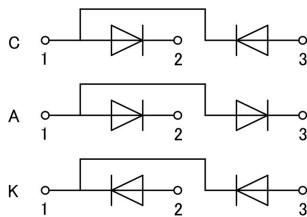
Applications

- Non-controllable rectifiers for AC/AC converters
- Line rectifiers for transistorized AC motor controllers
- Field supply for DC motors

Features

- International standard package
- High Surge Capability
- Simple Mounting

Circuit



Blocking Characteristics

TYPE			VRRM	VRSM	Units
MD330C12D3	MD330A12D3	MD330K12D3	1200V	1400V	V
MD330C14D3	MD330A14D3	MD330K14D3	1400V	1600V	V
MD330C16D3	MD330A16D3	MD330K16D3	1600V	1800V	V
MD330C18D3	MD330A18D3	MD330K18D3	1800V	2000V	V
MD330C20D3	MD330A20D3	MD330K20D3	2000V	2200V	V

Maximum Ratings

Symbol	Conditions	Values	Units
IFAV	Single phase ,half wave 180° conduction Tc=100℃	330	A
IFSM	t=10ms Tvj=TvjM	9100	A
i ² t	t=10ms Tvj=TvjM	414000	A ² s
Visol	a.c.50HZ;r.m.s.;1min,I _{iso} :2mA(max)	2500	V
Tvj		-40 to 150	℃
Tstg		-40 to 125	℃
Mt	To terminals(M8)	12±15%	Nm
Ms	To heatsink(M6)	6±15%	Nm
Weight	Module (Approximately)	870	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	per diode	0.12	℃/W
Rth(c-s)	per diode	0.04	℃/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
VFM	T=25℃ IF=1000A			1.35	V
IRRM	Tvj=TvjM V=VRRM			10	mA
VFO	Tvj=TvjM			0.75	V
rF	Tvj=TvjM			0.55	mΩ

Performance Curves

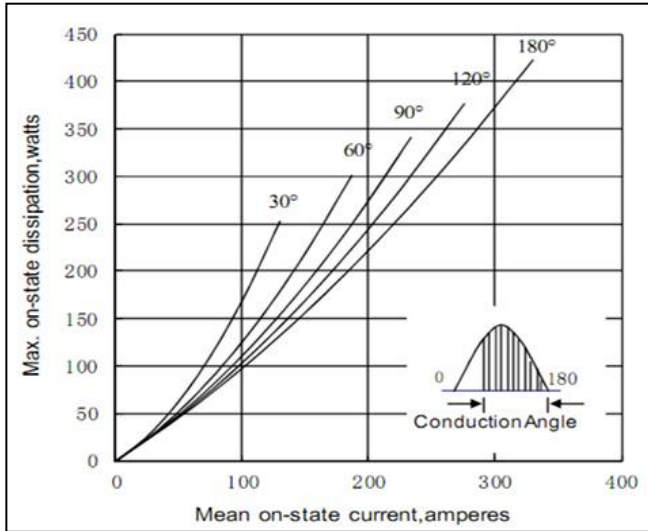


Fig1. Power dissipation

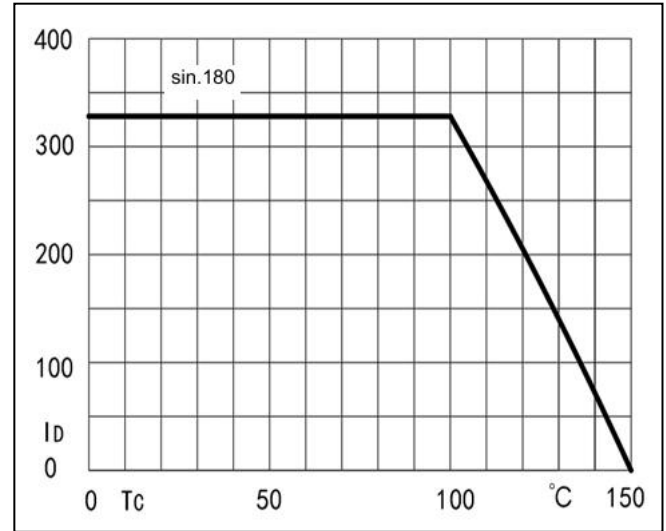


Fig2. Forward Current Derating Curve

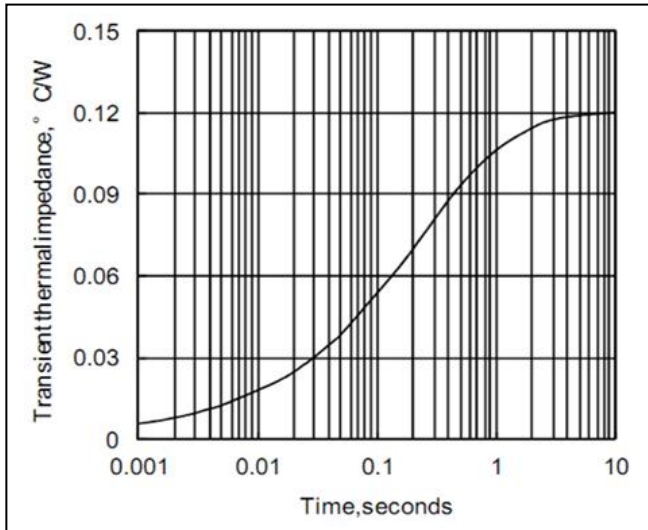


Fig3. Transient thermal impedance

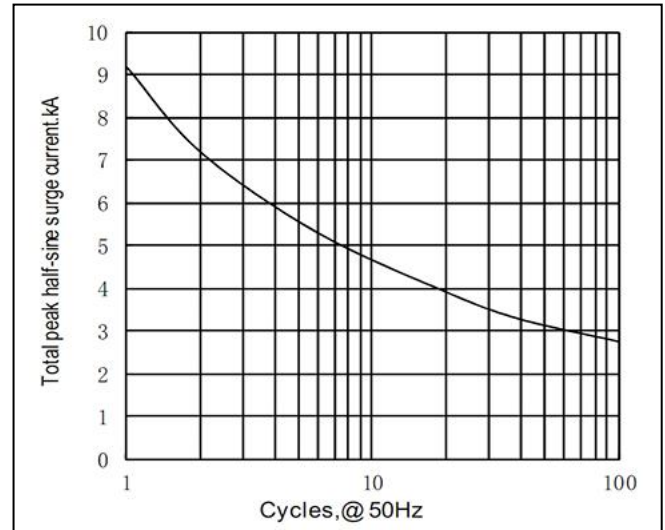


Fig4. Max Non-Repetitive Forward Surge Current

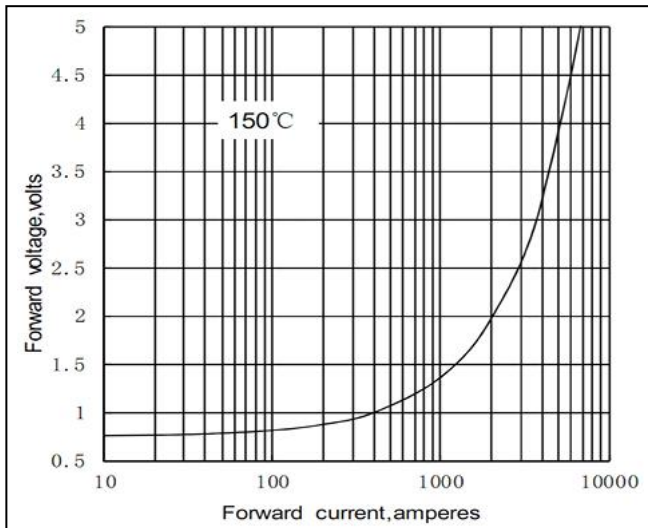
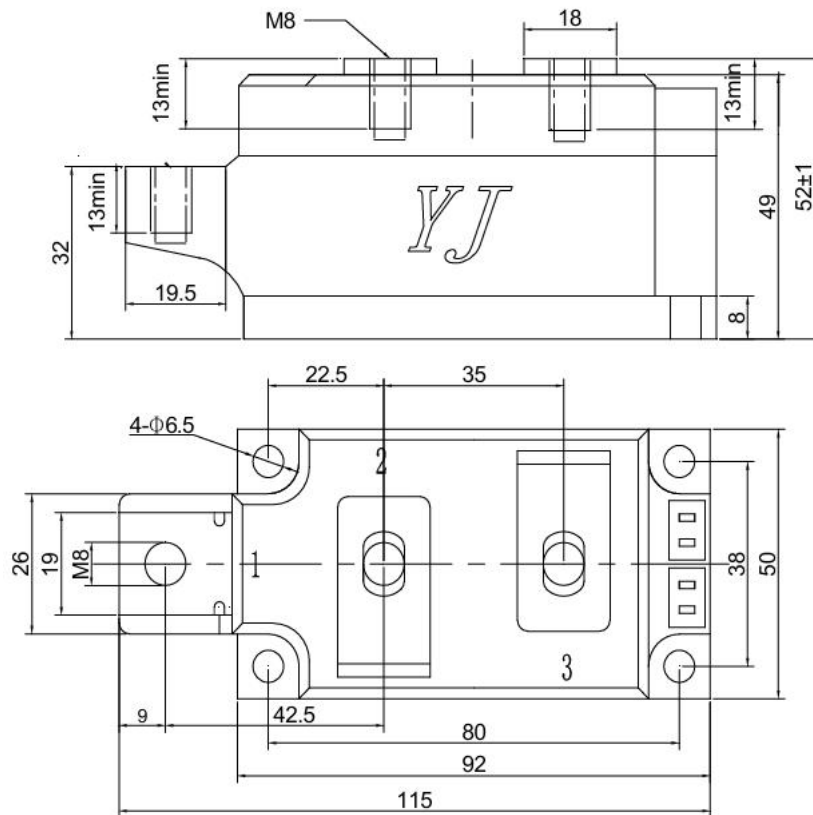


Fig5. Forward Characteristics

Package Outline Information

CASE: D3



Dimensions in mm

Unmarked dimensional tolerance: $\pm 0.5\text{mm}$



Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function, or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <http://www.21yangjie.com>, or consult your nearest Yangjie's sales office for further assistance.