



Rectifier Diode Module

VRRM 3000 to 3600V
IFAV 400A

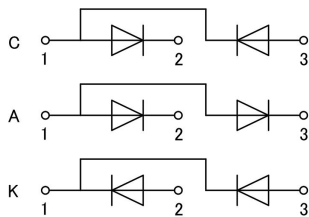
Applications

- 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	VRS	Units
MD400C30D6	MD400A30D6	MD400K30D6	3000V	3100V	V
MD400C32D6	MD400A32D6	MD400K32D6	3200V	3300V	V
MD400C34D6	MD400A34D6	MD400K34D6	3400V	3560V	V
MD400C36D6	MD400A36D6	MD400K36D6	3600V	3700V	V

Maximum Ratings

Symbol	Conditions	Values	Units
IFAV	Single phase ,half wave 180° conduction Tc=100℃	400	A
IFSM	t=10ms Tvj=TvjM	13000	A
i²t	t=10ms Tvj=TvjM	845000	A²s
Visol	a.c.50HZ;r.m.s.;1min,Iiso :2mA(max)	4000	V
Tvj		-40 to 150	℃
Tstg		-40 to 125	℃
Mt	To terminals(M10)	12±15%	Nm
Ms	To heatsink(M6)	6±15%	Nm
Weight	Module (Approximately)	1550	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	per diode	0.073	℃/W
Rth(c-s)	per diode	0.020	℃/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
VFM	T=25℃ IF =1200A			1.6	V
IRRM	Tvj=TvjM V=VRRM			30	mA
VFO	Tvj=TvjM			0.97	V
rF	Tvj=TvjM			0.72	mΩ



Performance Curves

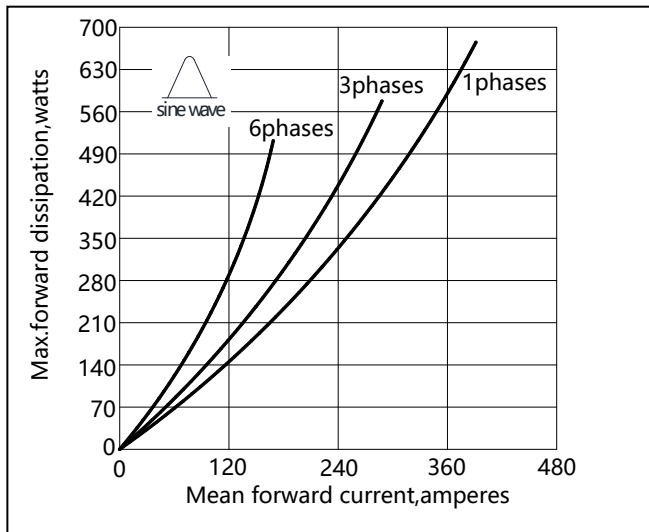


Fig1. Power dissipation

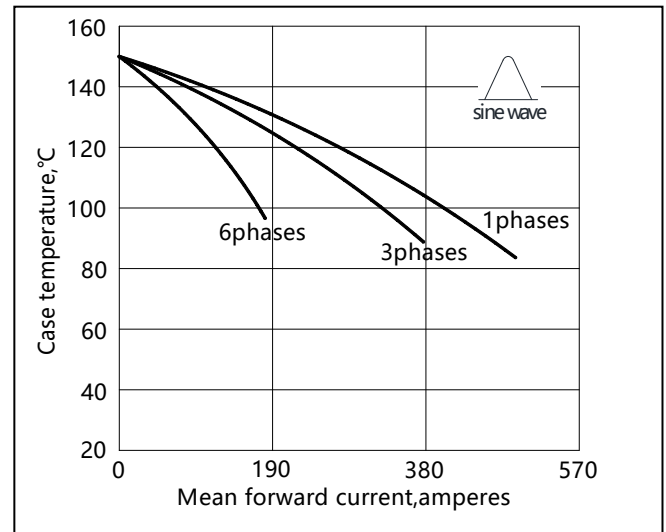


Fig2. Forward Current Derating Curve

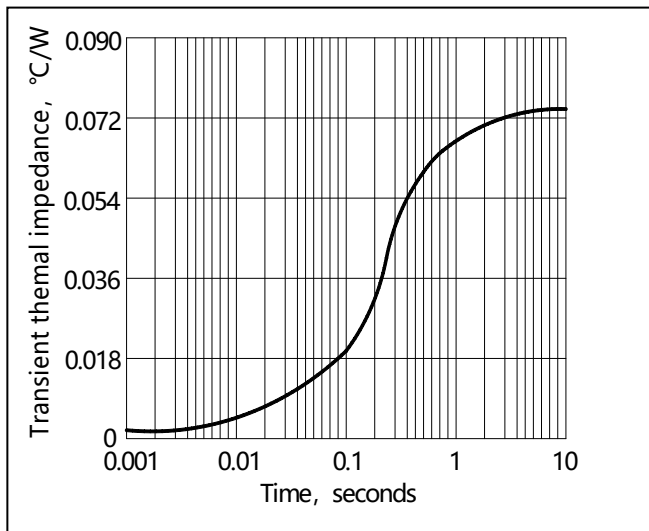


Fig3. Transient thermal impedance

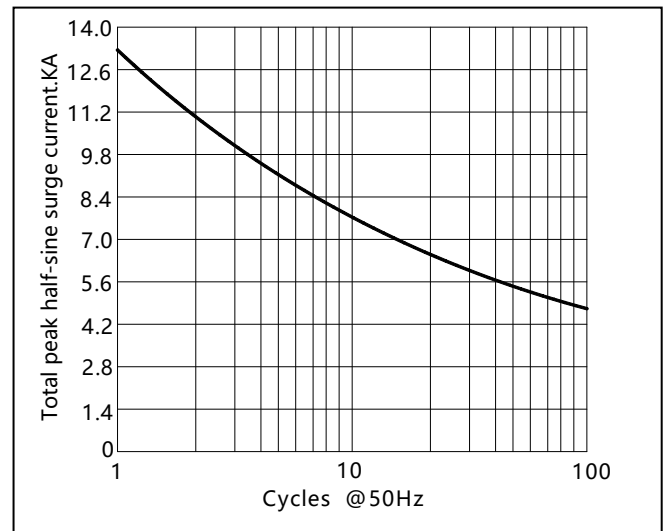


Fig4. Max Non-Repetitive Forward Surge Current

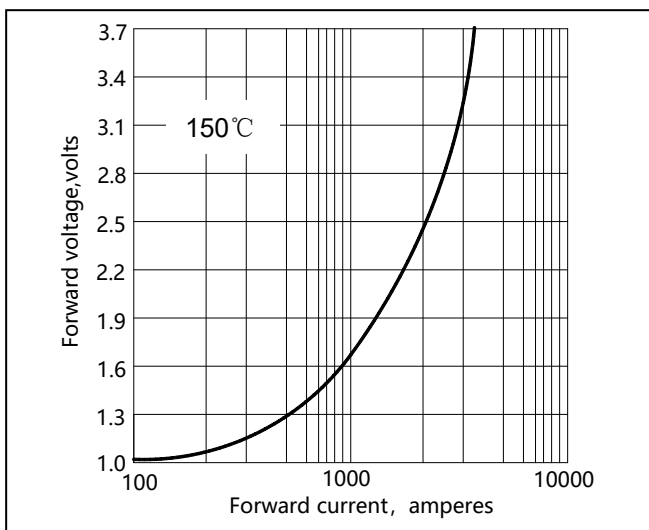
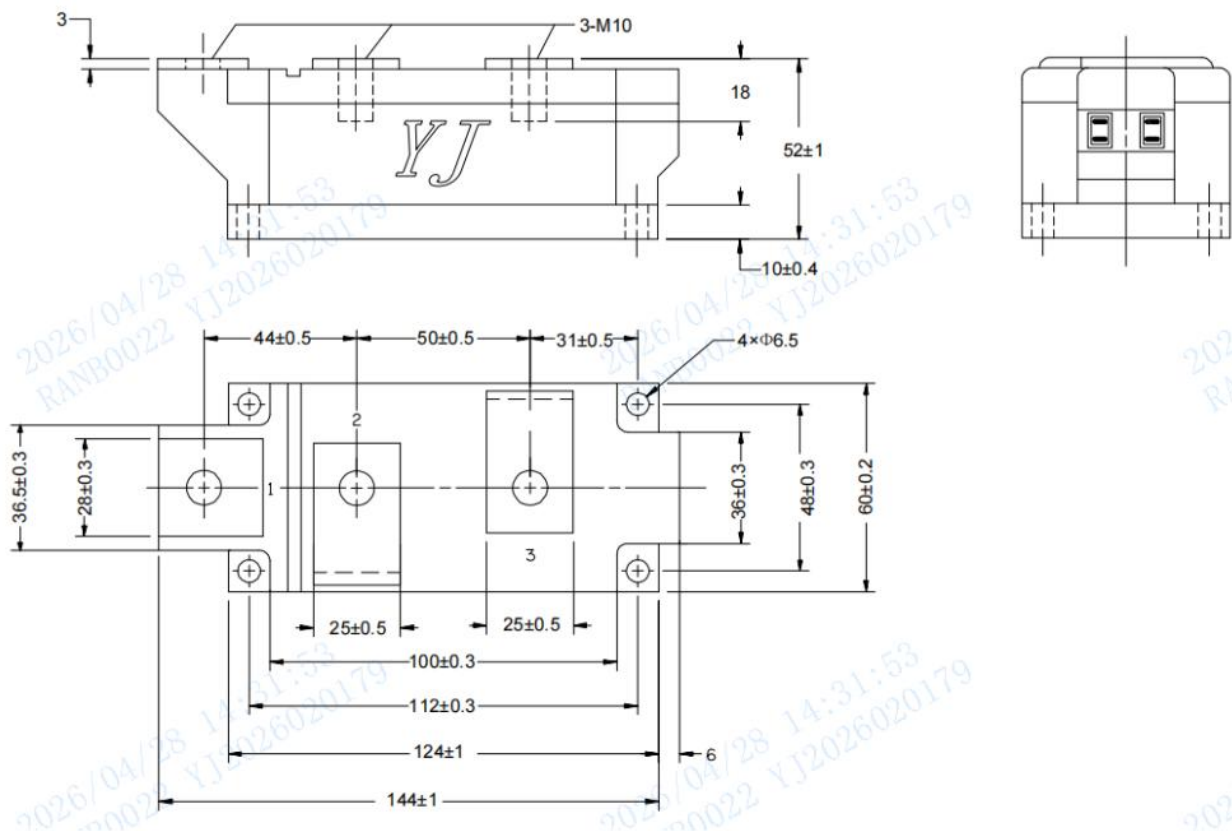


Fig5. Forward Characteristics

Package Outline Information

CASE: D6



Dimensions in mm

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



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