



Rectifier Diode Module

VRRM 3000 to 3600V
IFAV 250A

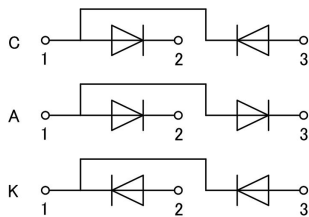
Applications

- 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
MD250C30D3	MD250A30D3	MD250K30D3	3000	3200	V
MD250C32D3	MD250A32D3	MD250K32D3	3200	3400	V
MD250C34D3	MD250A34D3	MD250K34D3	3400	3600	V
MD250C36D3	MD250A36D3	MD250K36D3	3600	3800	V

Maximum Ratings

Symbol	Conditions	Values	Units
IFAV	Single phase ,half wave 180° conduction Tc=100℃	250	A
IFSM	t=10ms Tvj=TVjM	9500	A
i²t	t=10ms Tvj=TVjM	4510000	A²s
Visol	a.c.50HZ;r.m.s.;1min,Iso :2mA(max)	3600	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)	800	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 =750A			1.7	V
IRRM	Tvj=TVjM V=VRRM			17	mA
VFO	Tvj=TVjM			0.95	V
rF	Tvj=TVjM			0.87	mΩ

Performance Curves

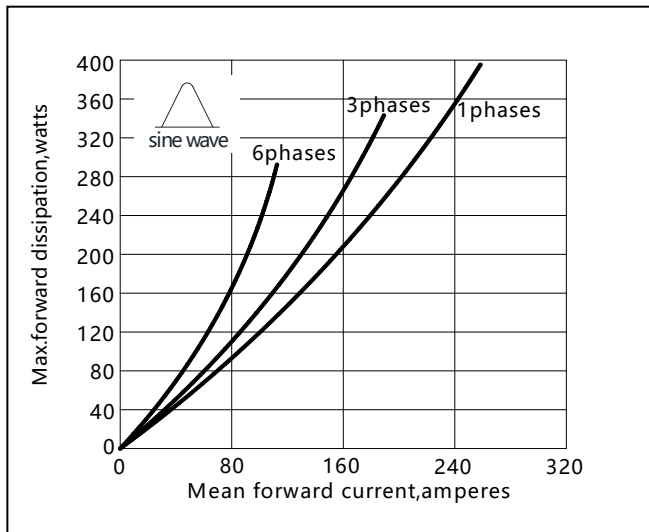


Fig1. Power dissipation

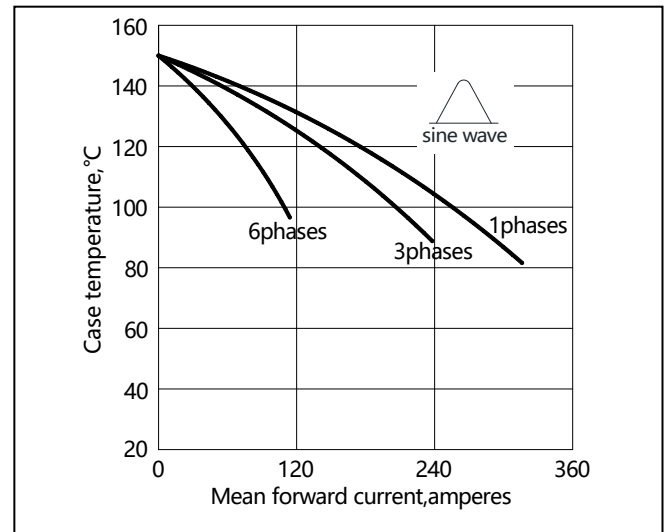


Fig2. Forward Current Derating Curve

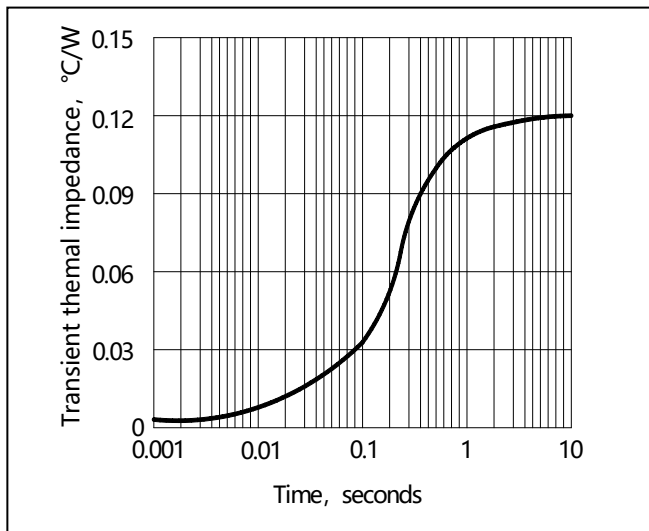


Fig3. Transient thermal impedance

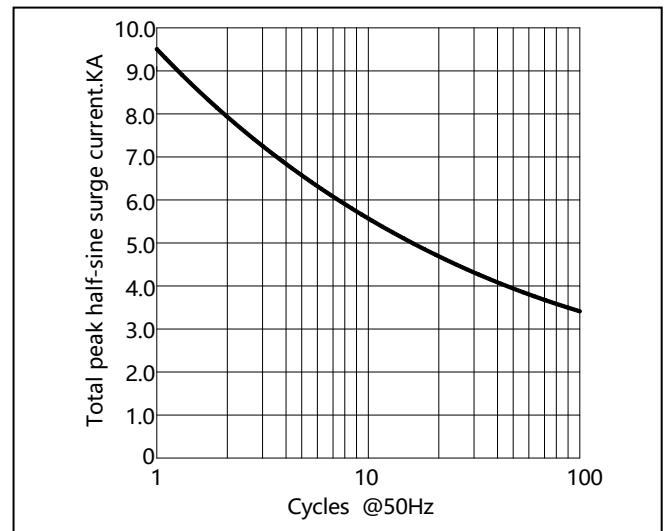


Fig4. Max Non-Repetitive Forward Surge Current

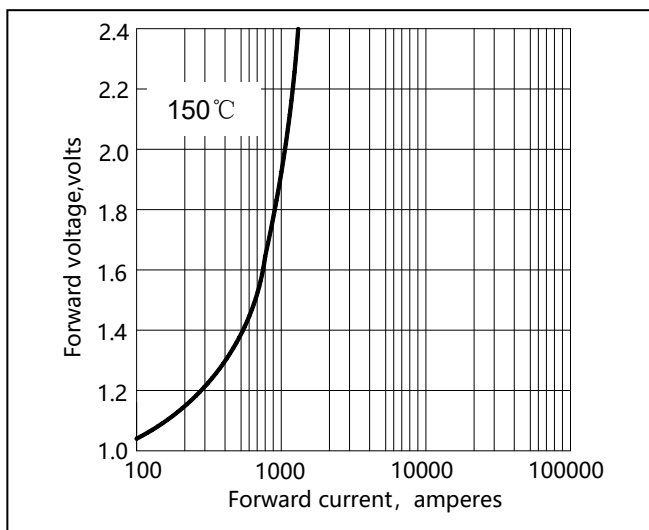


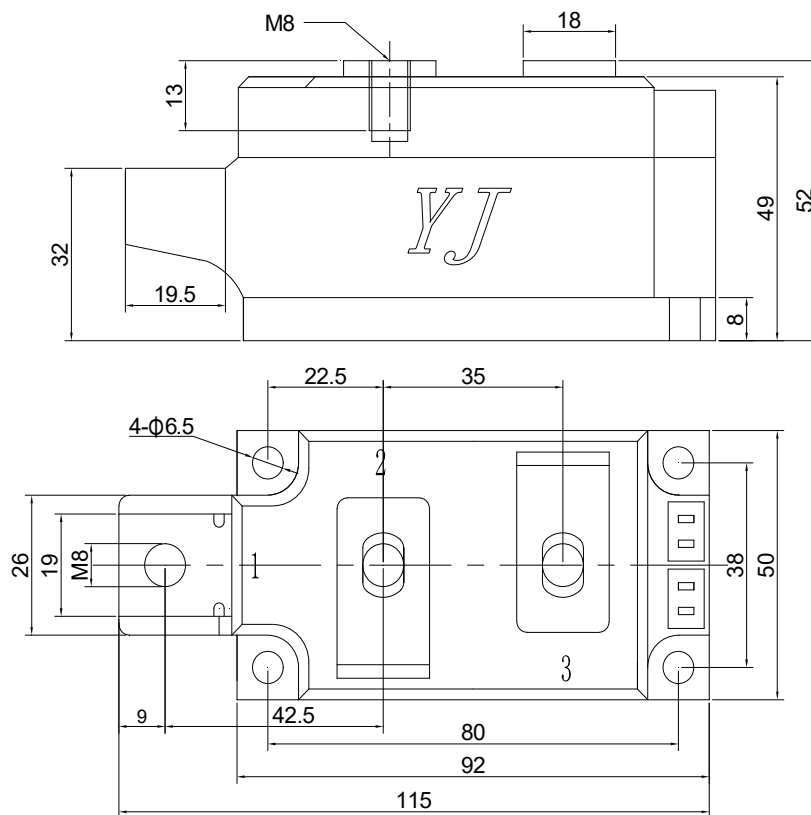
Fig5. Forward Characteristics



MD250C(A/K)-D3

Package Outline Information

CASE: D3



Dimensions in mm

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