



Rectifier Diode Module

VRRM 2200 to 2800V

IFAV 250A

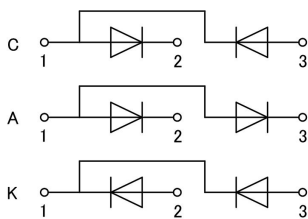
Applications

- 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	V _{RSM}	Units
MD250C22D3	MD250A22D3	MD250K22D3	2200	2400	V
MD250C24D3	MD250A24D3	MD250K24D3	2400	2600	V
MD250C26D3	MD250A26D3	MD250K26D3	2600	2800	V
MD250C28D3	MD250A28D3	MD250K28D3	2800	3000	V

Maximum Ratings

Symbol	Conditions	Values	Units
IFAV	Single phase ,half wave 180° conduction T _c =100°C	250	A
IFSM	t=10ms T _{vj} =T _{vjM}	9000	A
i ² t	t=10ms T _{vj} =T _{vjM}	405000	A ² s
V _{isol}	a.c.50HZ;r.m.s.;1min,I _{iso} :2mA(max)	3000	V
T _{vj}		-40 to 150	°C
T _{stg}		-40 to 125	°C
Mt	To terminals(M8)	12±15%	Nm
Ms	To heatsink(M6)	6±15%	Nm
Weight	Module (Approximately)	690	g

Thermal Characteristics

Symbol	Conditions	Values	Units
R _{th(j-c)}	per diode	0.12	°C/W
R _{th(c-s)}	per diode	0.04	°C/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V _{FM}	T=25°C I _F =750A			1.4	V
I _{RRM}	T _{vj} =T _{vjM} V=VRRM			20	mA
V _{FO}	T _{vj} =T _{vjM}			0.95	V
r _F	T _{vj} =T _{vjM}			1.0	mΩ

Performance Curves

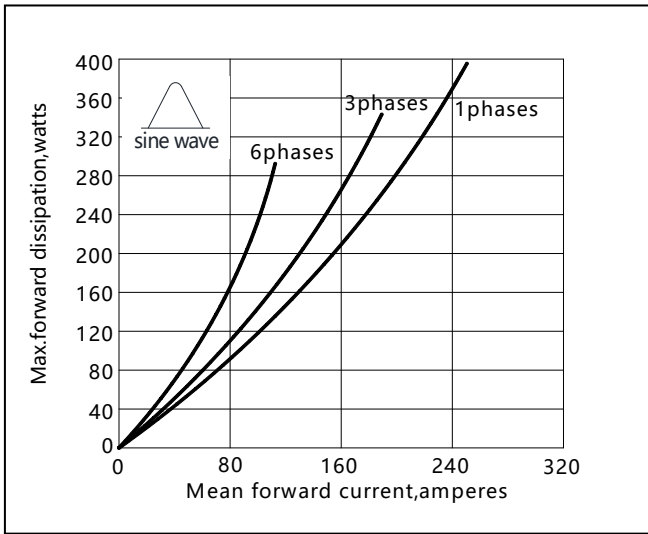


Fig1. Power dissipation

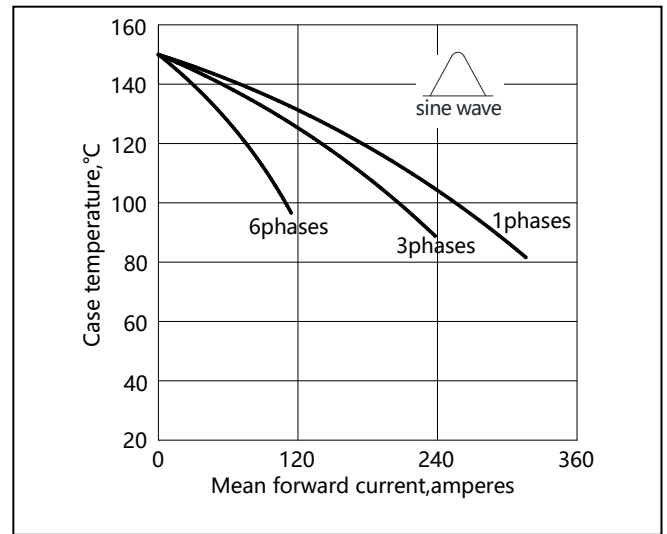


Fig2. Forward Current Derating Curve

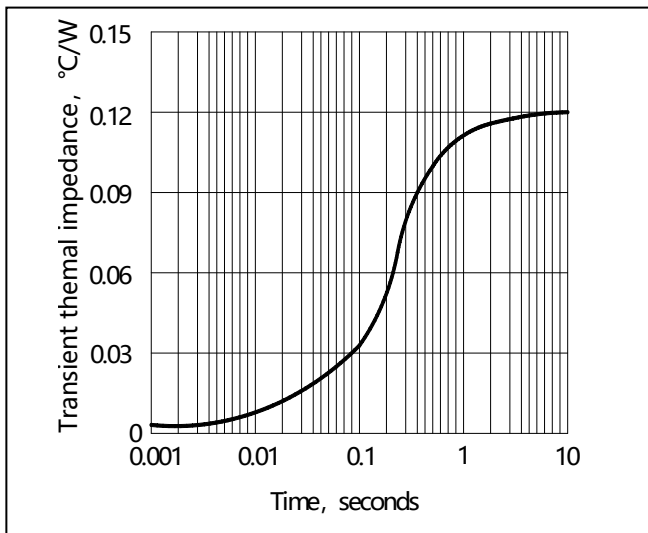


Fig3. Transient thermal impedance

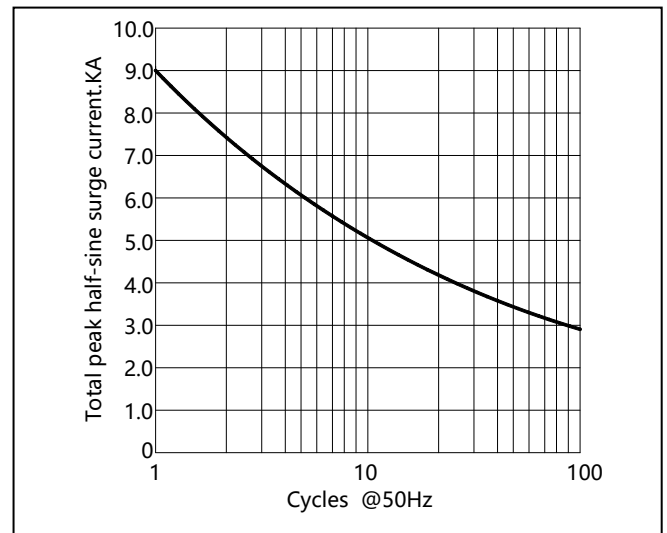


Fig4. Max Non-Repetitive Forward Surge Current

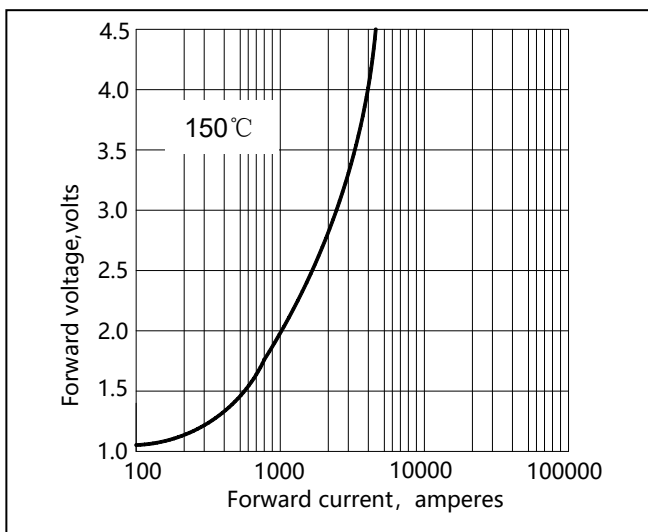


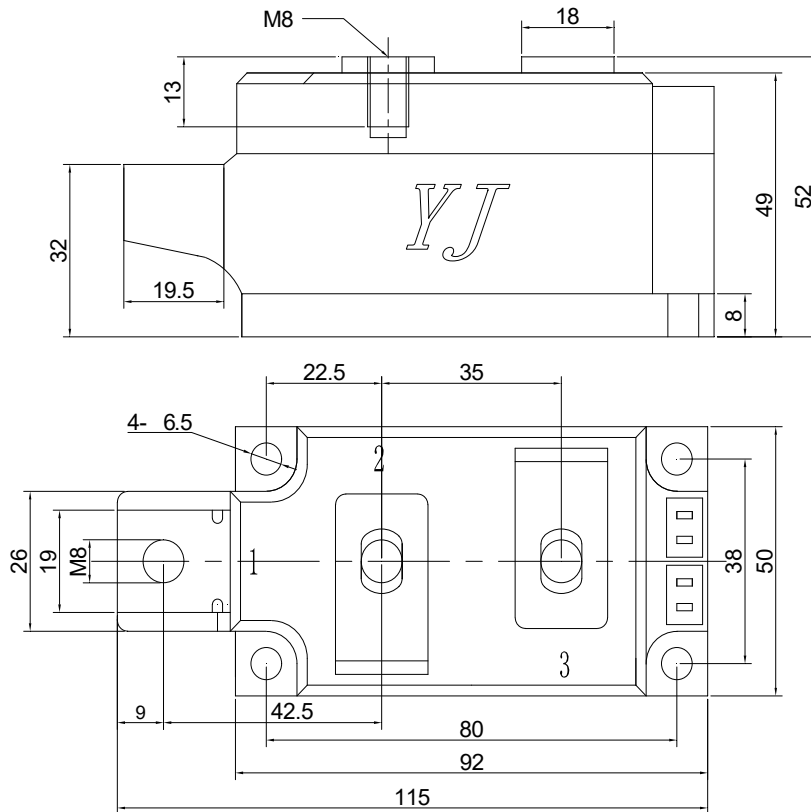
Fig5. Forward Characteristics



MD250C(A/K)-D3

Package Outline Information

CASE: D3



Dimensions in mm

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