



Rectifier Diode Module

VRRM 2200 to 2800V
IFAV 800A

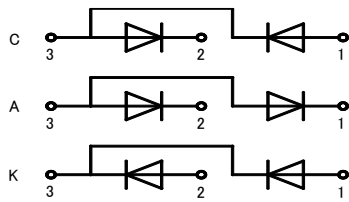
Applications

- 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	VRSRM	Units
MD800C22D8	MD800A22D8	MD800K22D8	2200	2400	V
MD800C24D8	MD800A24D8	MD800K24D8	2400	2600	V
MD800C26D8	MD800A26D8	MD800K26D8	2600	2800	V
MD800C28D8	MD800A28D8	MD800K28D8	2800	3000	V

Maximum Ratings

Symbol	Conditions	Values	Units
IFAV	Single phase ,half wave 180° conduction Tc=100℃	800	A
IFSM	t=10ms Tvj=TVjM	22000	A
i ² t	t=10ms Tvj=TVjM	2420000	A ² s
V _{isol}	a.c.50HZ;r.m.s.;1min,I _{iso} :2mA(max)	3000	V
Tvj		-40 to 150	℃
T _{stg}		-40 to 125	℃
Mt	To terminals(M10)	14±15%	Nm
Ms	To heatsink(M6)	10±15%	Nm
Weight	Module (Approximately)	3400	g

Thermal Characteristics

Symbol	Conditions	Values	Units
R _{th(j-c)}	per diode	0.05	℃/W
R _{th(c-s)}	per diode	0.02	℃/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V _{FM}	T=25℃ IF =2400A			1.45	V
I _{RRM}	Tvj=TVjM V=VRRM			40	mA
V _{FO}	Tvj=TVjM			0.9	V
r _F	Tvj=TVjM			0.16	mΩ

Performance Curves

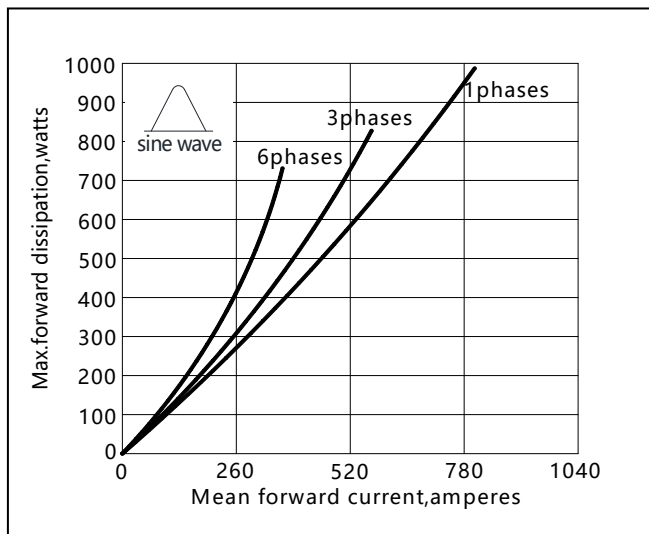


Fig1. Power dissipation

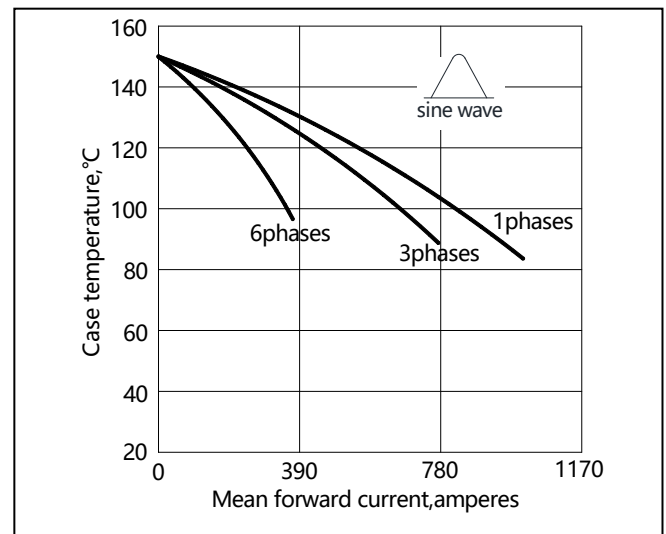


Fig2. Forward Current Derating Curve

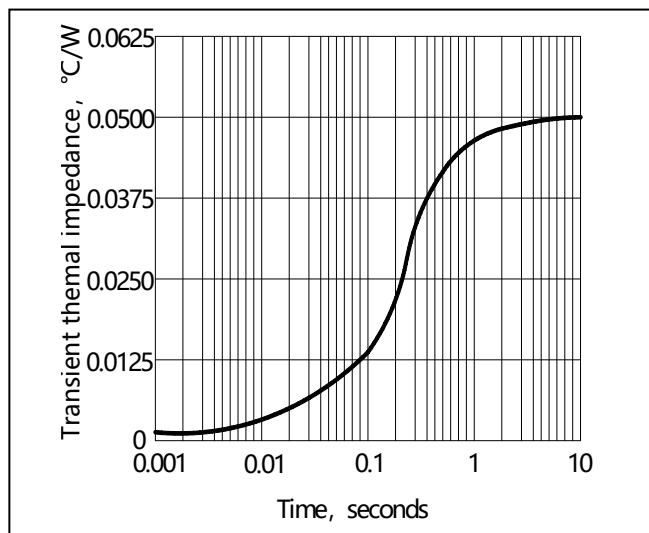


Fig3. Transient thermal impedance

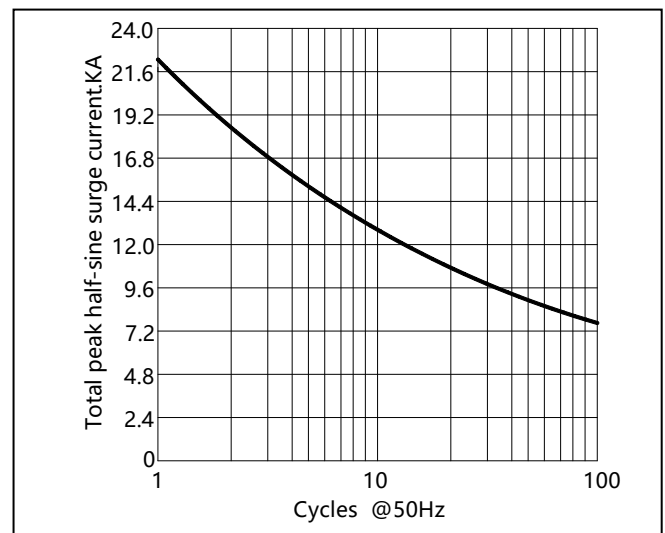


Fig4. Max Non-Repetitive Forward Surge Current

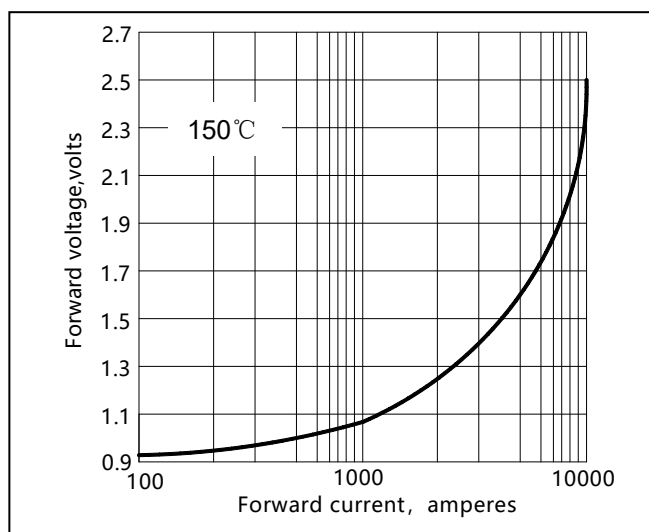
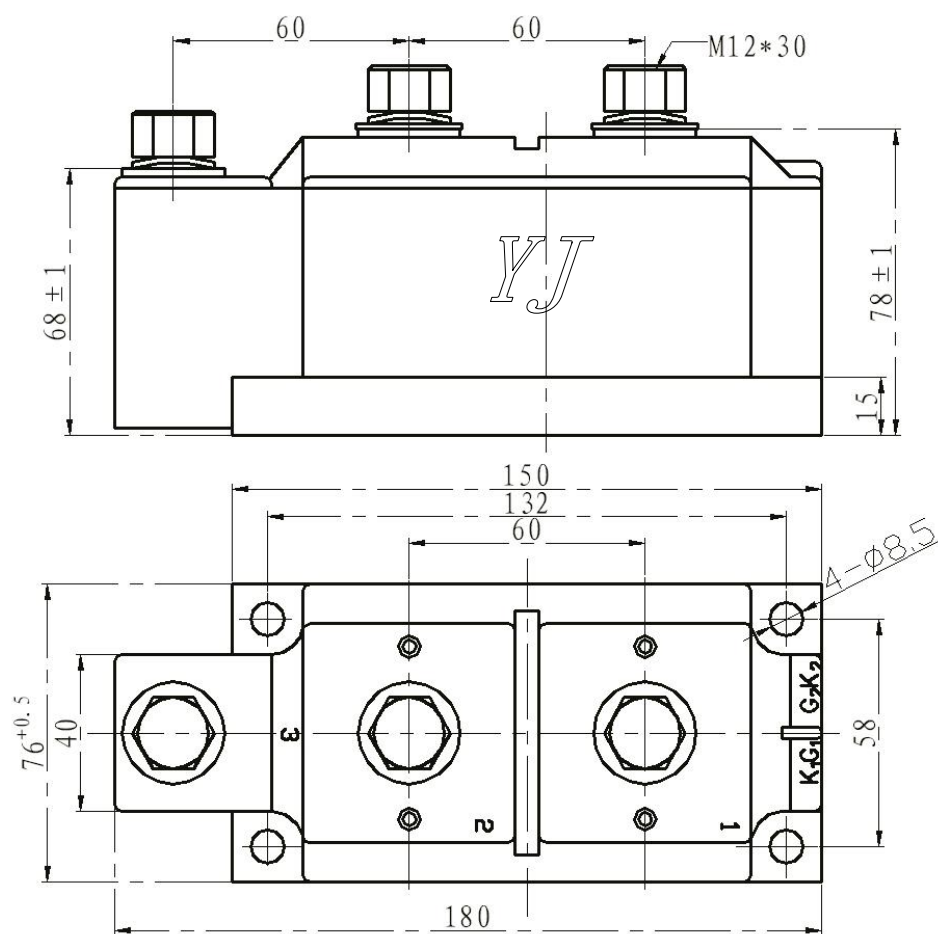


Fig5. Forward Characteristics

Package Outline Information

CASE: D8



Dimensions in mm

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