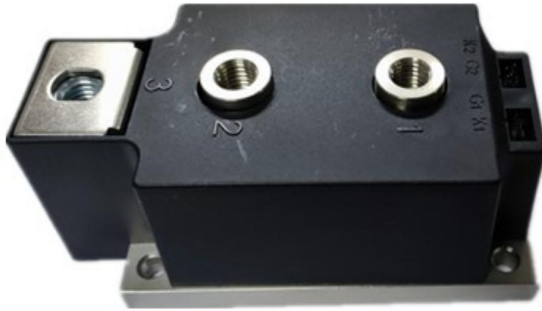




Rectifier Diode Module

VRRM 2200 to 2800V
IFAV 500A

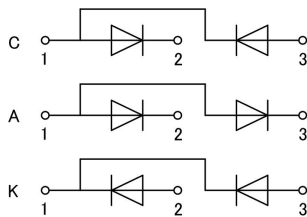
Applications

- 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
MD500C22D5	MD500A22D5	MD500K22D5	2200	2400	V
MD500C24D5	MD500A24D5	MD500K24D5	2400	2600	V
MD500C26D5	MD500A26D5	MD500K26D5	2600	2800	V
MD500C28D5	MD500A28D5	MD500K28D5	2800	3000	V

Maximum Ratings

Symbol	Conditions	Values	Units
IFAV	Single phase ,half wave 180° conduction Tc=100℃	500	A
IFSM	t=10ms Tvj=TVjM	16000	A
i²t	t=10ms Tvj=TVjM	1280000	A²s
Visol	a.c.50HZ;r.m.s.;1min,Iiso :2mA(max)	3000	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)	1580	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	per diode	0.071	℃/W
Rth(c-s)	per diode	0.04	℃/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
VFM	T=25℃ IF =1500A			1.45	V
IRRM	Tvj=TVjM V=VRRM			30	mA
VFO	Tvj=TVjM			0.85	V
rF	Tvj=TVjM			0.38	mΩ



Performance Curves

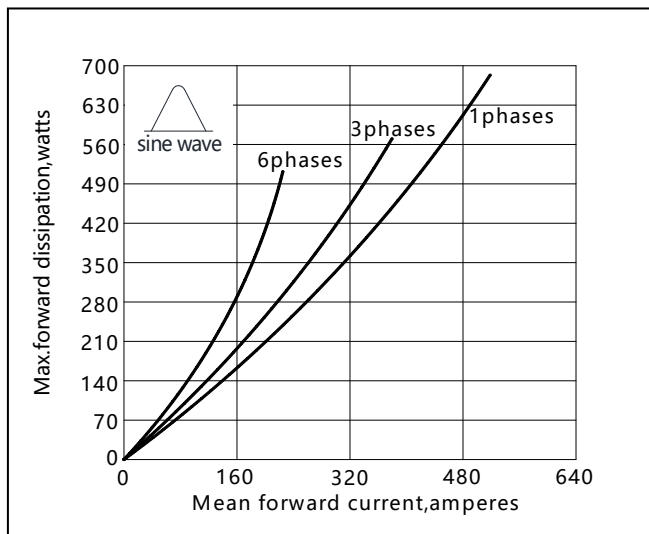


Fig1. Power dissipation

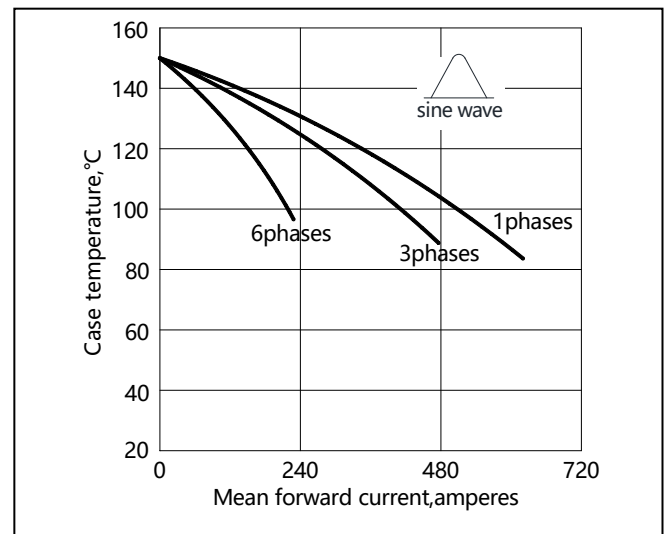


Fig2. Forward Current Derating Curve

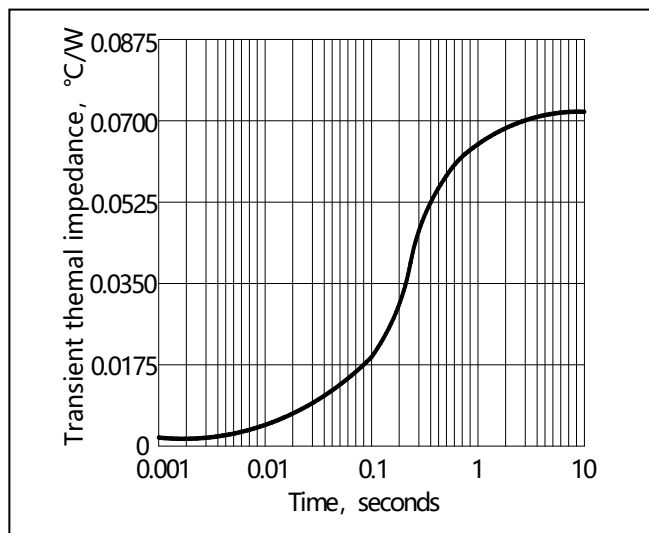


Fig3. Transient thermal impedance

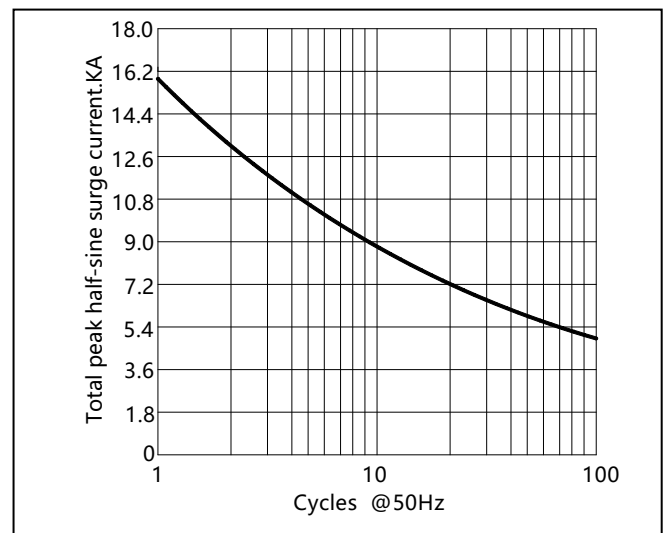


Fig4. Max Non-Repetitive Forward Surge Current

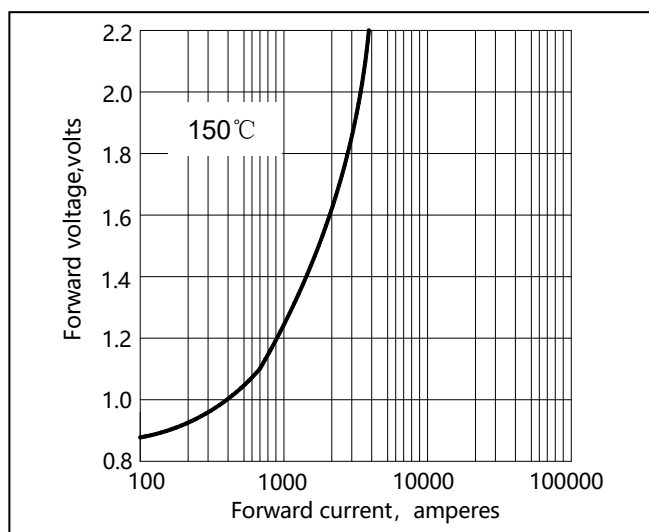
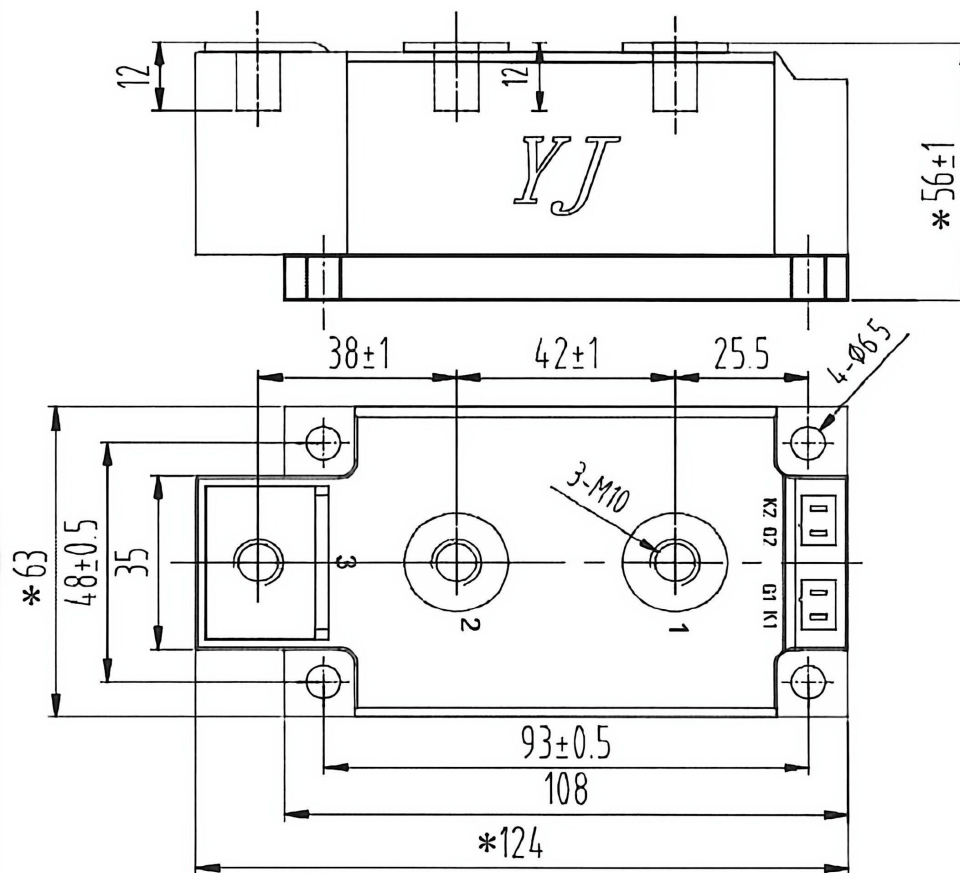


Fig5. Forward Characteristics

Package Outline Information

CASE: D5



Dimensions in mm

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



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