

Rectifier Diode Module

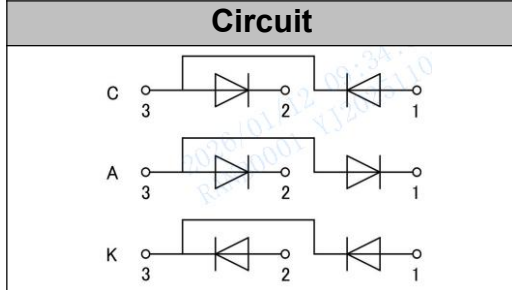
VRRM 3000 to 3600V
IFAV 800A

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



Blocking Characteristics

TYPE			VRRM	VRSRM	Units
MD800C30D7	MD800A30D7	MD800K30D7	3000	3200	V
MD800C32D7	MD800A32D7	MD800K32D7	3200	3400	V
MD800C34D7	MD800A34D7	MD800K34D7	3400	3600	V
MD800C36D7	MD800A36D7	MD800K36D7	3600	3800	V

Maximum Ratings

Symbol	Conditions	Values	Units
IFAV	Single phase ,half wave 180° conduction Tc=70℃	800	A
IFSM	t=10ms Tvj=TVjM	21000	A
i ² t	t=10ms Tvj=TVjM	2205000	A ² s
Visol	a.c.50HZ;r.m.s.;1min,I _{iso} :2mA(max)	5000	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)	1820	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	per diode	0.064	℃/W
Rth(c-s)	per diode	0.02	℃/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
VFM	T=25℃ IF =1500A			1.55	V
IRRM	Tvj=TVjM V=VRRM			35	mA
VFO	Tvj=TVjM			0.75	V
rF	Tvj=TVjM			0.41	mΩ



Performance Curves

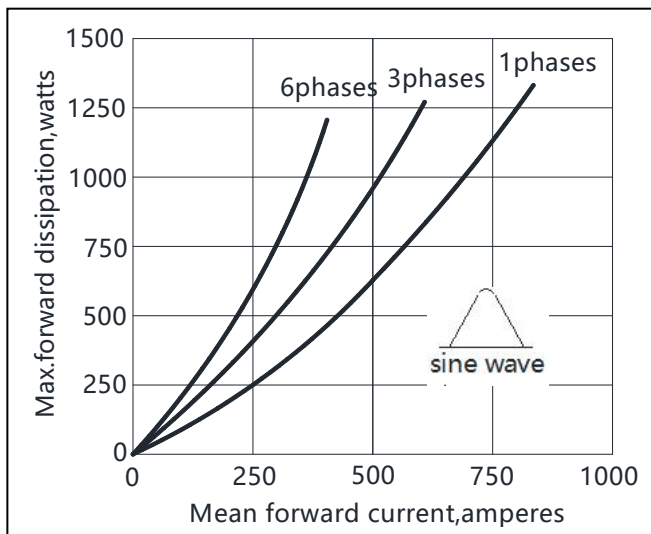


Fig1. Power dissipation

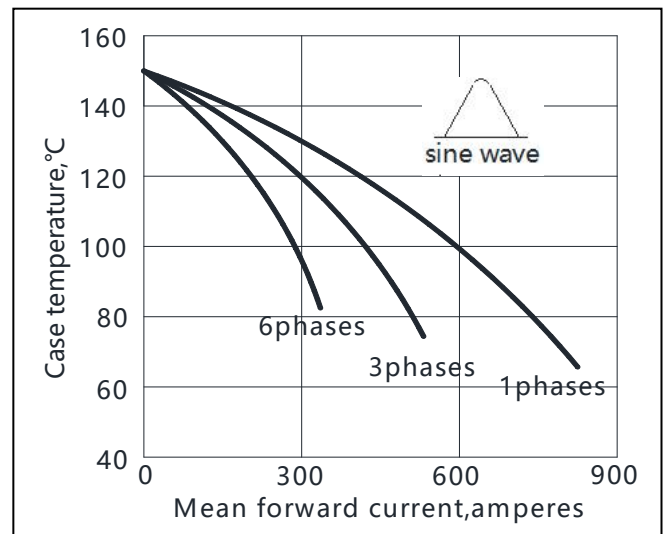


Fig2. Forward Current Derating Curve

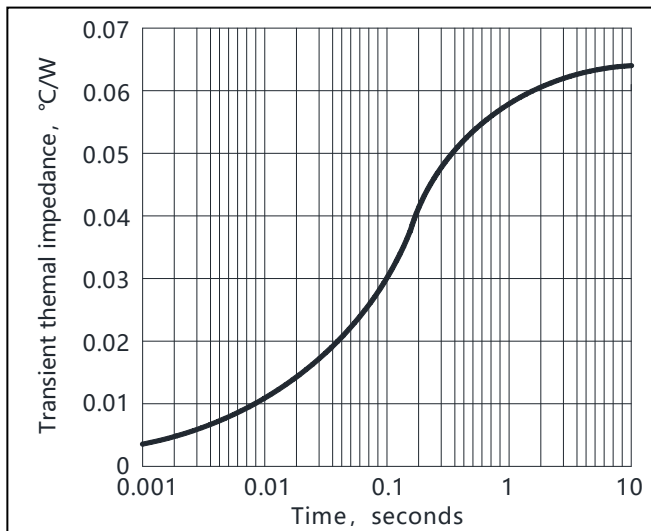


Fig3. Transient thermal impedance

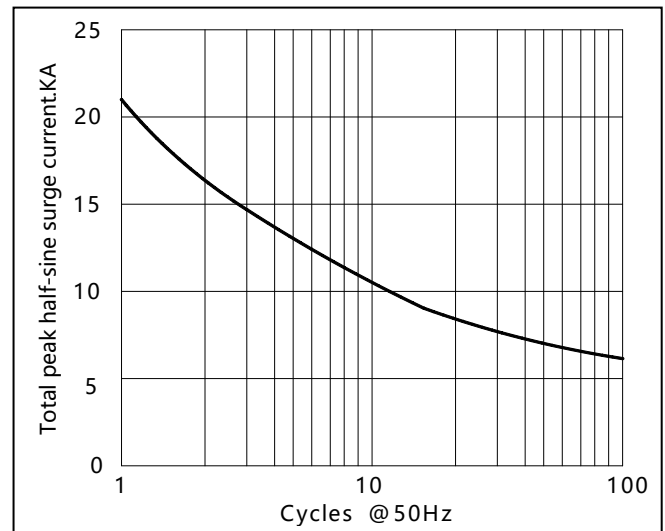


Fig4. Max Non-Repetitive Forward Surge Current

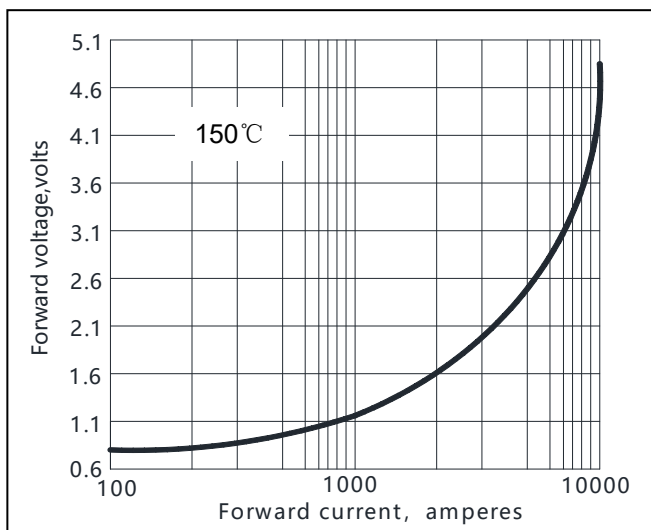
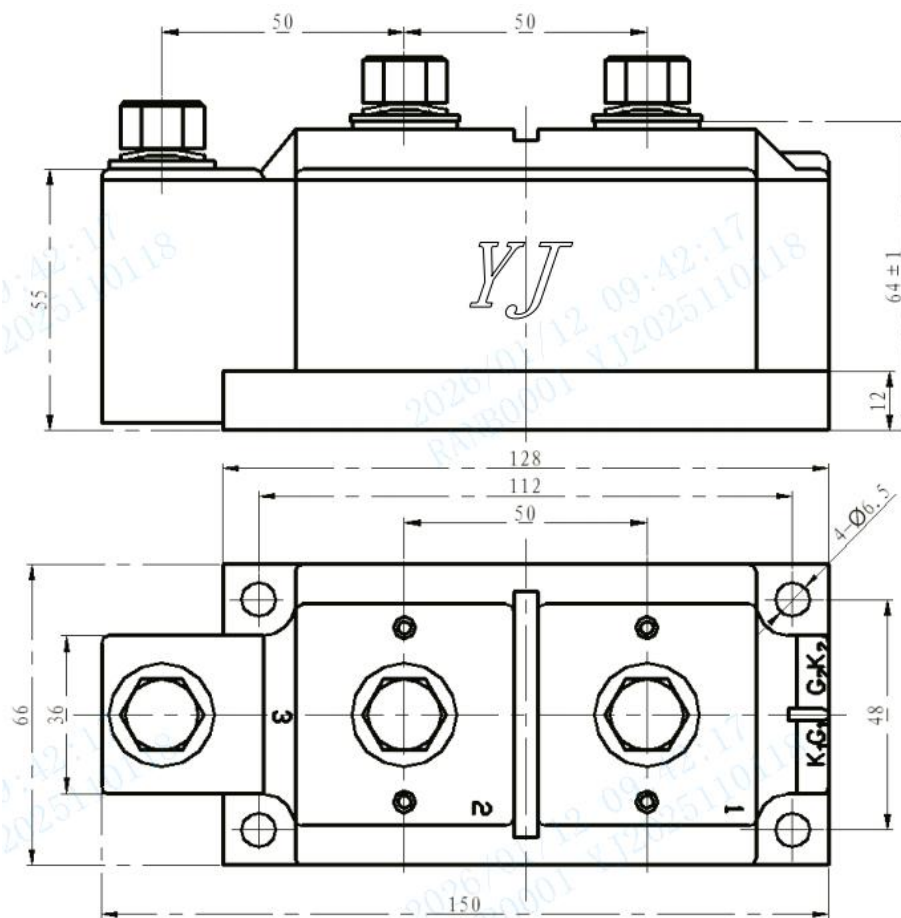


Fig5. Forward Characteristics

Package Outline Information

CASE: D7



Dimensions in mm

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



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