MD800C(A/K)-D8

Rectifier Diode Module

V_{RRM} 1200 to 2000V
I_{FAV} 800A

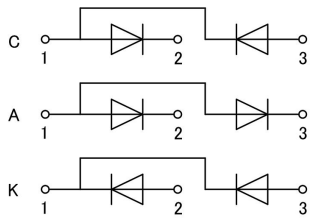
Applications

- 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			V_{RRM}	V_{RSM}	Units
MD800C12D8	MD800A12D8	MD800K12D8	1200	1300	V
MD800C14D8	MD800A14D8	MD800K14D8	1400	1500	V
MD800C16D8	MD800A16D8	MD800K16D8	1600	1760	V
MD800C18D8	MD800A18D8	MD800K18D8	1800	2000	V
MD800C20D8	MD800A20D8	MD800K20D8	2000	2200	V

Maximum Ratings

Symbol	Conditions	Values	Units
I_{FAV}	Single phase ,half wave 180° conduction Tc=100℃	800	A
I_{FSM}	t=10ms T_{vj}=T_{vjM}	22000	A
i^2t	t=10ms T_{vj}=T_{vjM}	2205000	A^2s
V_{isol}	a.c.50HZ;r.m.s.;1min,I_{iso}:2mA(max)	2500	V
T_{vj}		-40 to 150	℃
T_{stg}		-40 to 125	℃
Mt	To terminals(M12)	14±15%	Nm
Ms	To heatsink(M8)	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℃ I_F =2400A			1.4	V
I_{RRM}	T_{vj}=T_{vjM} V=V_{RRM}			30	mA
V_{FO}	T_{vj}=T_{vjM}			0.78	V
r_F	T_{vj}=T_{vjM}			0.18	mΩ

Performance Curves

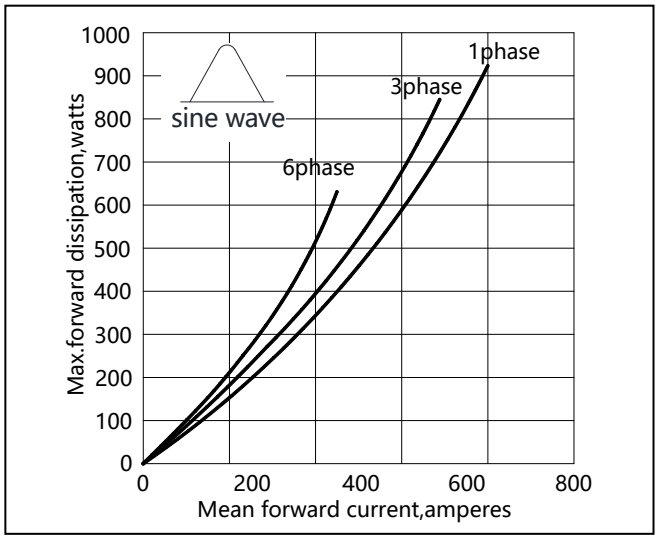


Fig1. Power dissipation

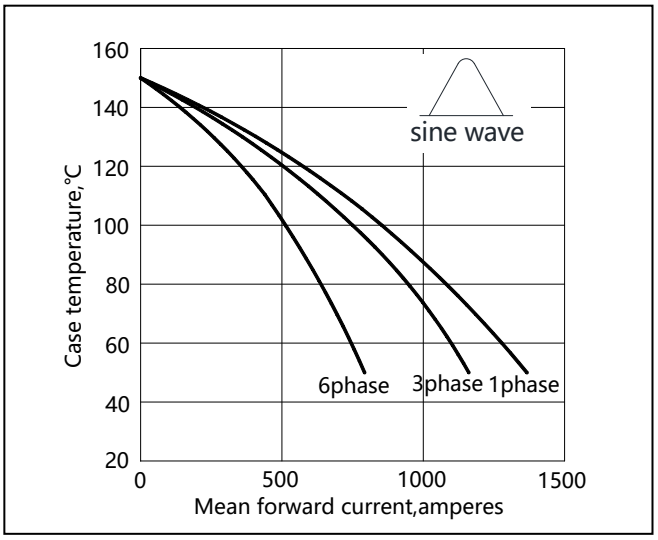


Fig2.Forward Current Derating Curve

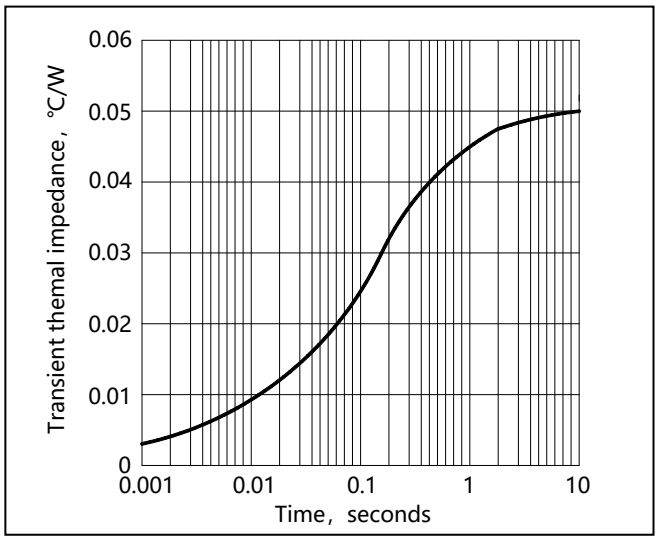


Fig3. Transient thermal impedance

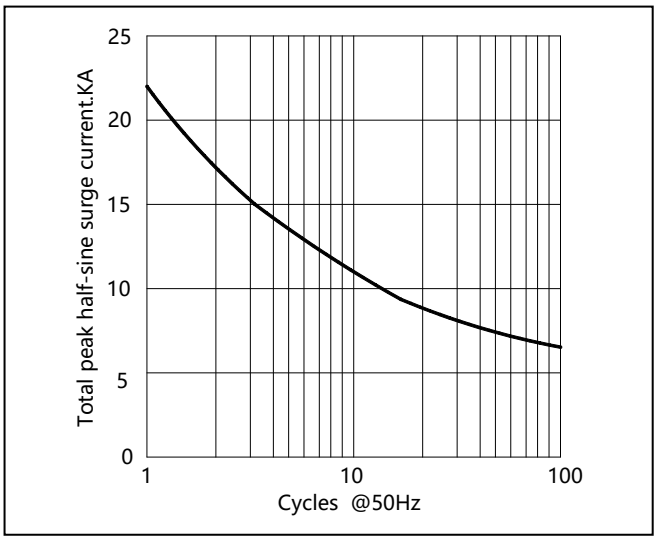


Fig4. Max Non-Repetitive Forward Surge Current

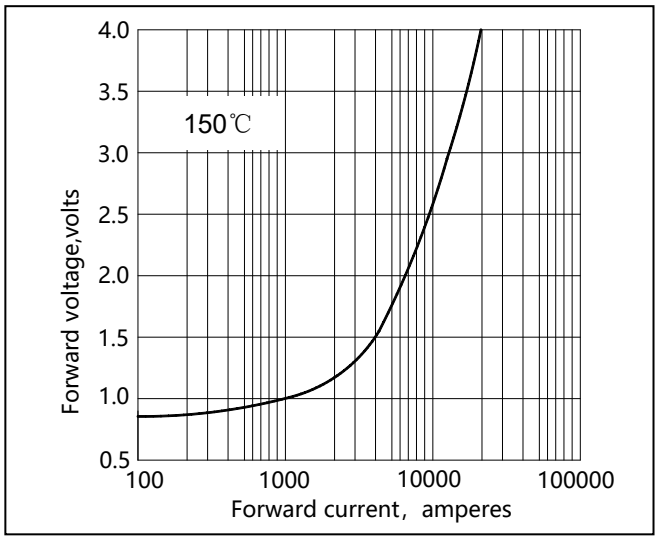
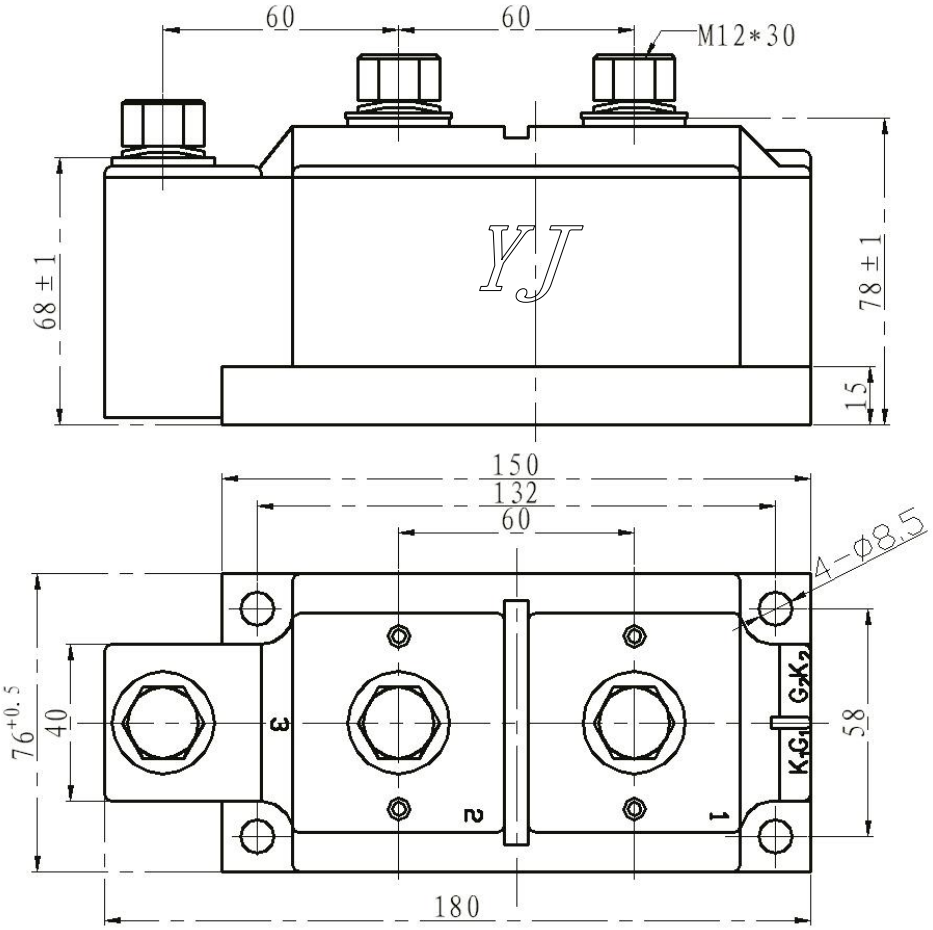


Fig5. Forward Characteristics

Package Outline Information

CASE: D8



Dimensions in mm
Unmarked dimensional tolerance：±0.5mm