



MD1000C(A/K)-D9



Rectifier Diode Module

VRRM 2200 to 2800V

IFAV 1000A

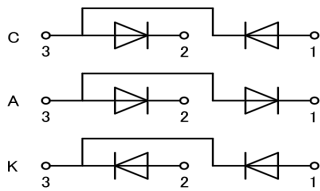
Applications

- 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
MD1000C22D9	MD1000A22D9	MD1000K22D9	2200	2400	V
MD1000C24D9	MD1000A24D9	MD1000K24D9	2400	2600	V
MD1000C26D9	MD1000A26D9	MD1000K26D9	2600	2800	V
MD1000C28D9	MD1000A28D9	MD1000K28D9	2800	3000	V

Maximum Ratings

Symbol	Conditions	Values	Units
IFAV	Single phase ,half wave 180° conduction Tc=100℃	1000	A
	Single phase ,half wave 180° conduction Tc=85℃	1200	A
IFSM	t=10ms Tvj=TVjM	28000	A
i²t	t=10ms Tvj=TVjM	3920000	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(M12)	14±15%	Nm
Ms	To heatsink(M8)	10±15%	Nm
Weight	Module (Approximately)	4050	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	per diode	0.048	℃/W
Rth(c-s)	per diode	0.020	℃/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
VFM	T=25℃ IF =3000A			1.45	V
IRRM	Tvj=TVjM V=VRRM			40	mA
VFO	Tvj=TVjM			0.72	V
rF	Tvj=TVjM			0.13	mΩ

Performance Curves

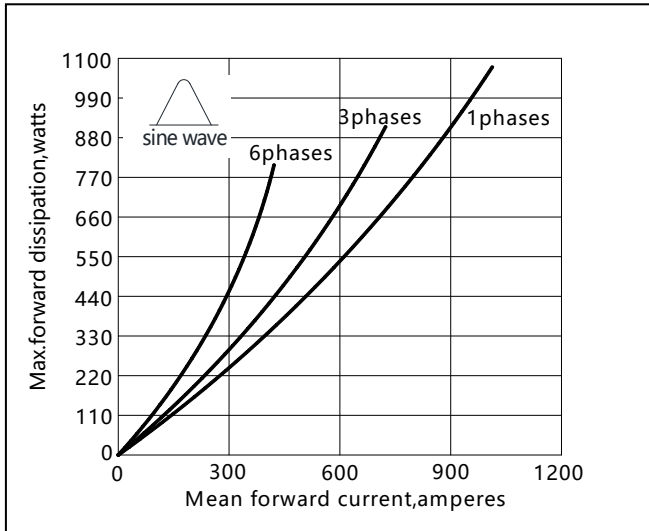


Fig1. Power dissipation

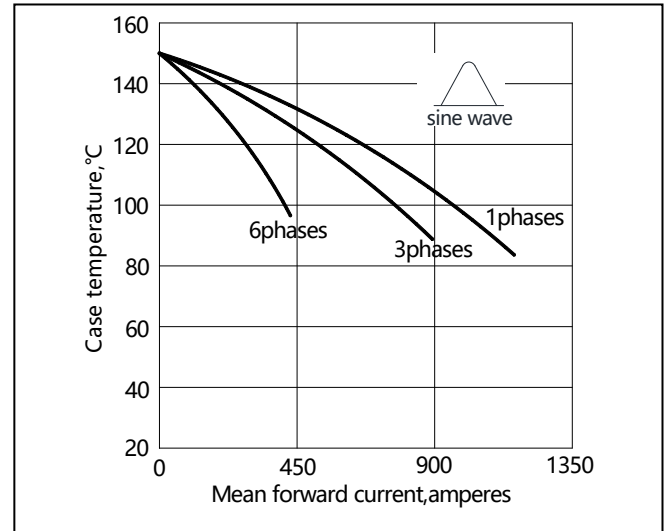


Fig2. Forward Current Derating Curve

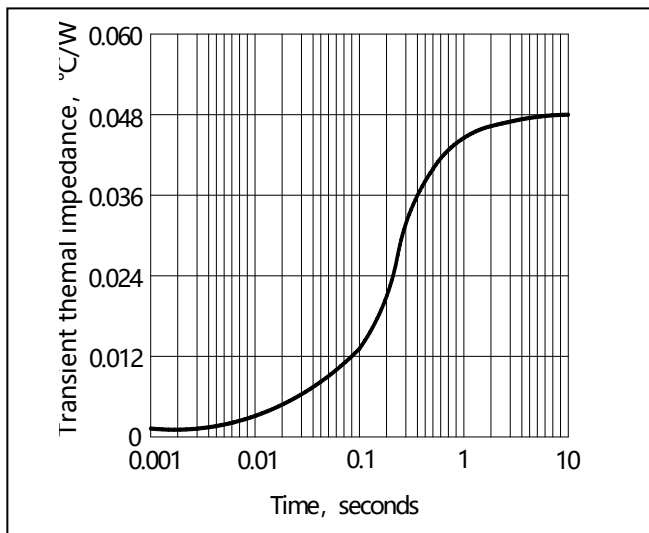


Fig3. Transient thermal impedance

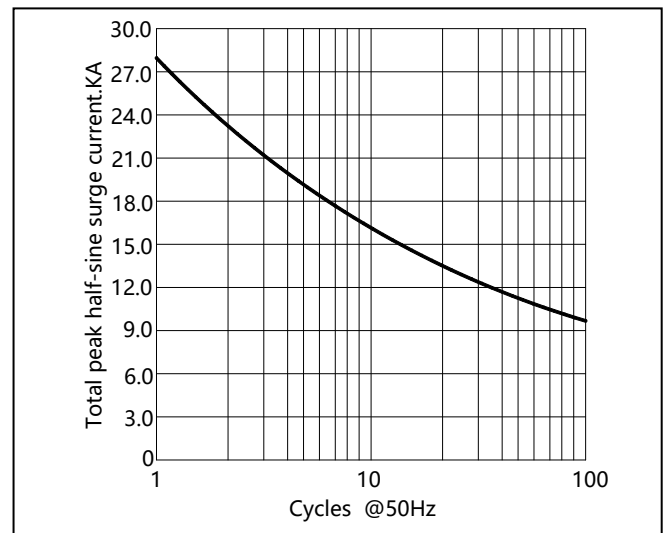


Fig4. Max Non-Repetitive Forward Surge Current

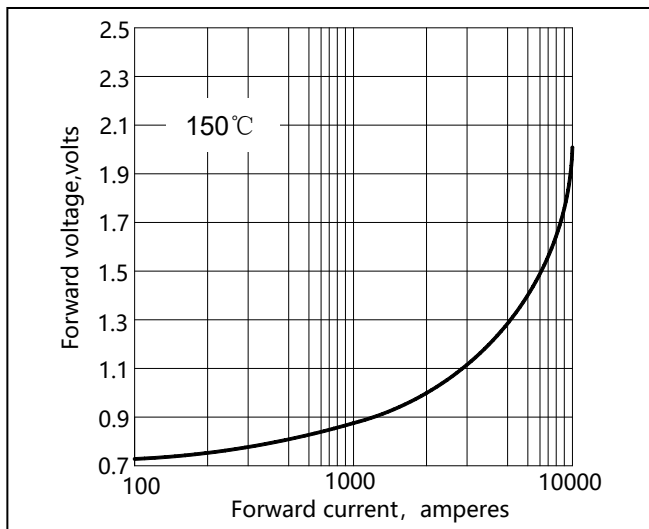
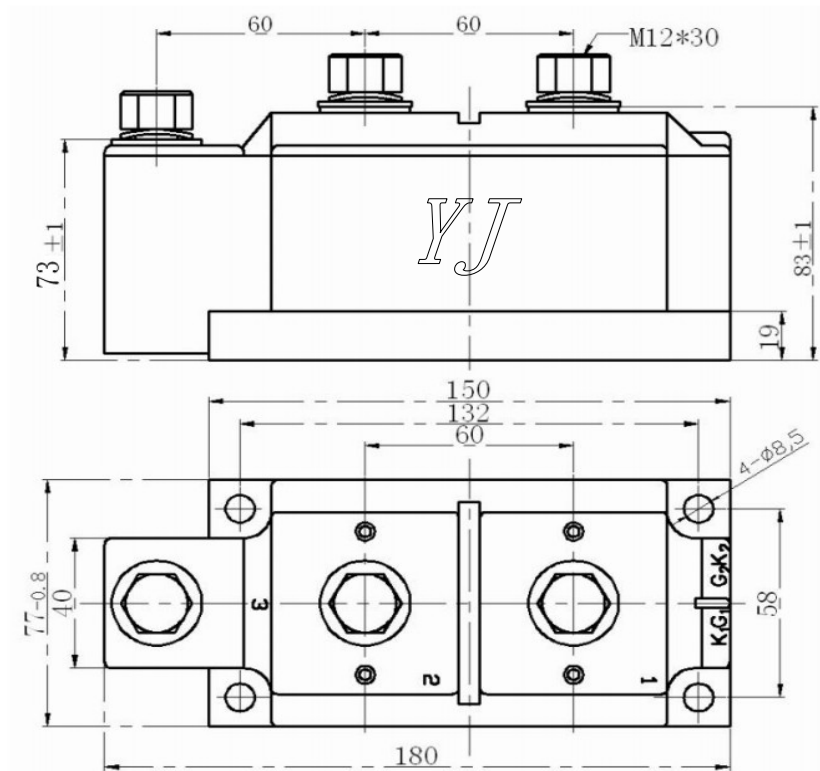


Fig5. Forward Characteristics

Package Outline Information

CASE: D9



Dimensions in mm

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