



MD110C(A/K)-AD2

Rectifier Diode Module



VRRM 3000 to 3600V
IFAV 110A

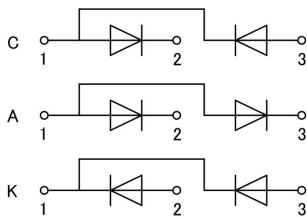
Applications

- 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
MD110C30AD2	MD110A30AD2	MD110K30AD2	3000	3100	V
MD110C32AD2	MD110A32AD2	MD110K32AD2	3200	3300	V
MD110C34AD2	MD110A34AD2	MD110K34AD2	3400	3500	V
MD110C36AD2	MD110A36AD2	MD110K36AD2	3600	3700	V

Maximum Ratings

Symbol	Conditions	Values	Units
IFAV	Single phase ,half wave 180° conduction Tc=100°C	110	A
IFSM	t=10ms Tvj=TvjM	2100	A
i ² t	t=10ms Tvj=TvjM	22000	A ² s
Visol	a.c.50HZ;r.m.s.;1min,Iiso :2mA(max)	4500	V
Tvj		-40 to 150	°C
Tstg		-40 to 125	°C
Mt	To terminals(M6)	6±15%	Nm
Ms	To heatsink(M6)	6±15%	Nm
Weight	Module (Approximately)	320	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	per diode	0.33	°C/W
Rth(c-s)	per diode	0.12	°C/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
VFM	T=25°C IF =330A			1.8	V
IRRM	Tvj=TvjM V=VRRM			15	mA
VFO	Tvj=TvjM			0.85	V
rF	Tvj=TvjM			1.76	mΩ



Performance Curves

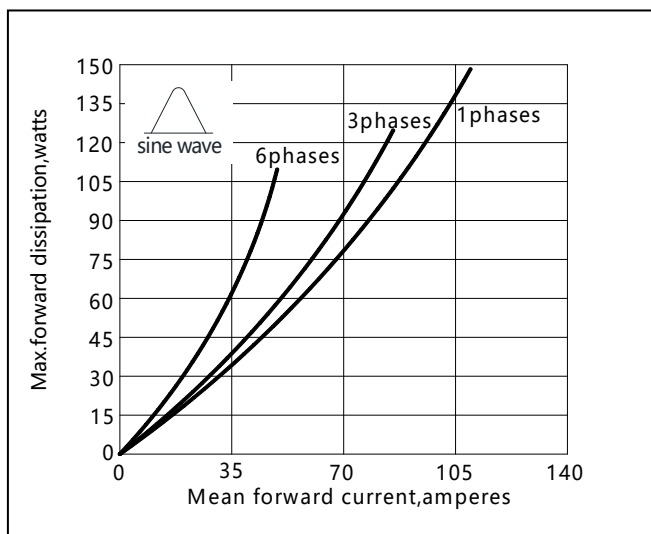


Fig1. Power dissipation

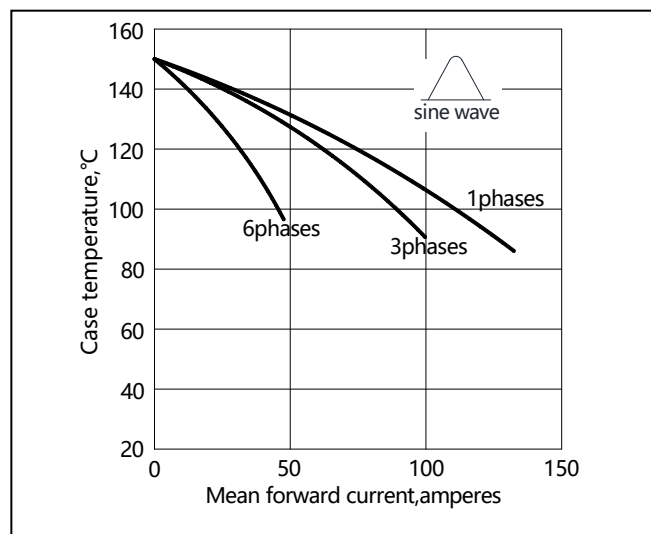


Fig2. Forward Current Derating Curve

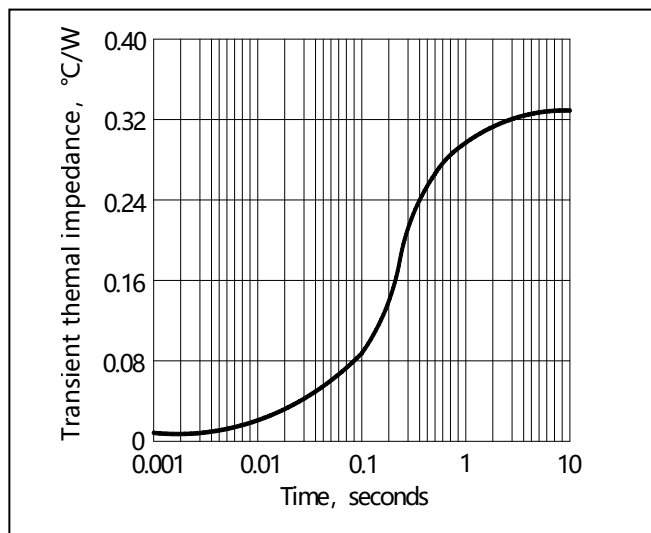


Fig3. Transient thermal impedance

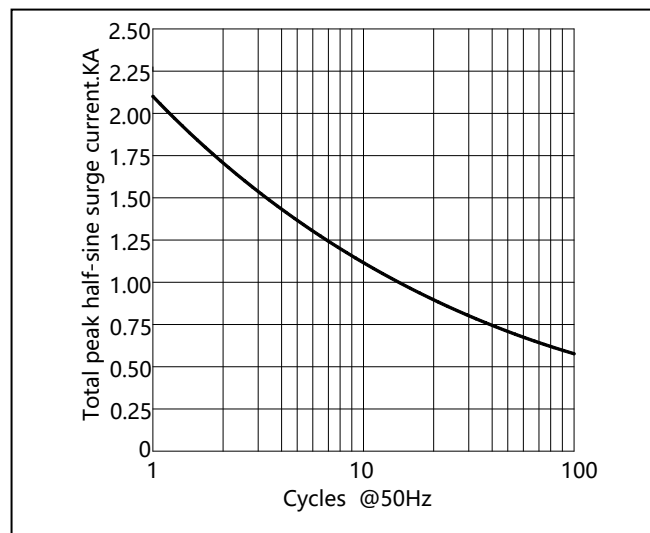


Fig4. Max Non-Repetitive Forward Surge Current

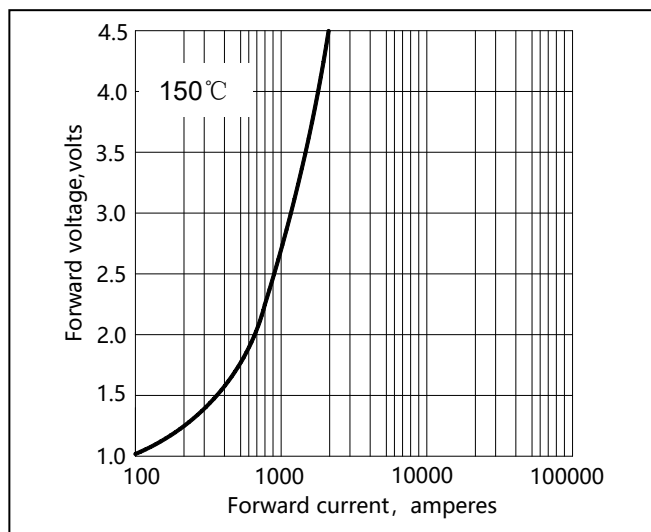


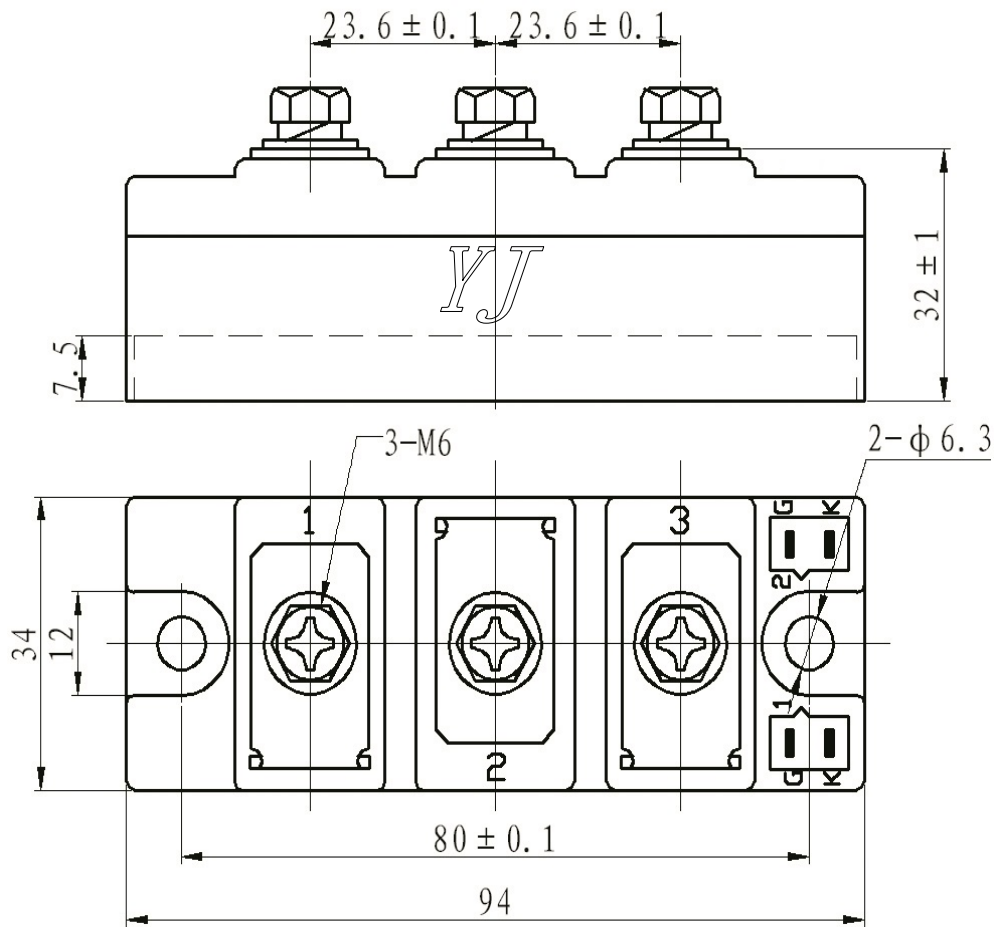
Fig5. Forward Characteristics



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Package Outline Information

CASE: AD2



Dimensions in mm

Unmarked dimensional tolerance: ± 0.5 mm