



Rectifier Diode Module

V_{RRM} 3000 to 3600V

I_{FAV} 600A

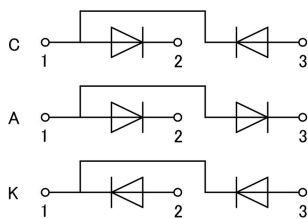
Applications

- 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
MD600C30D8	MD600A30D8	MD600K30D8	3000	3200	V
MD600C32D8	MD600A32D8	MD600K32D8	3200	3400	V
MD600C34D8	MD600A34D8	MD600K34D8	3400	3600	V
MD600C36D8	MD600A36D8	MD600K36D8	3600	3800	V

Maximum Ratings

Symbol	Conditions	Values	Units
I _{FAV}	Single phase ,half wave 180° conduction T _c =100℃	600	A
I _{FSM}	t=10ms T _{vj} =T _{vjM}	19000	A
i ² t	t=10ms T _{vj} =T _{vjM}	1905000	A ² s
V _{isol}	a.c.50HZ;r.m.s.;1min,I _{iso} :2mA(max)	4000	V
T _{vj}		-40 to 150	℃
T _{stg}		-40 to 125	℃
M _t	To terminals(M12)	14±15%	Nm
M _s	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 =1800A			1.85	V
I _{RRM}	T _{vj} =T _{vjM} V=V _{RRM}			50	mA
V _{FO}	T _{vj} =T _{vjM}			0.85	V
r _F	T _{vj} =T _{vjM}			0.40	mΩ



Performance Curves

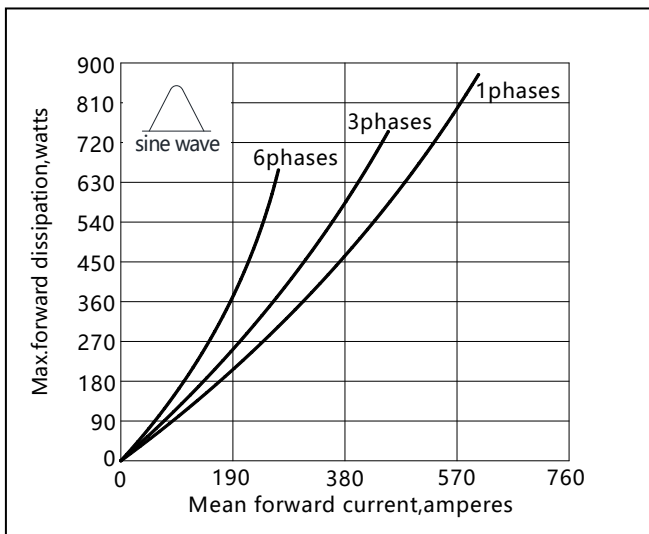


Fig1. Power dissipation

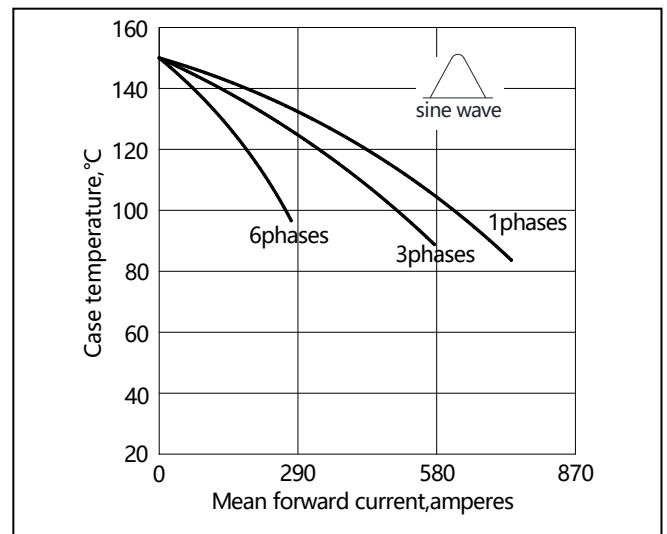


Fig2. Forward Current Derating Curve

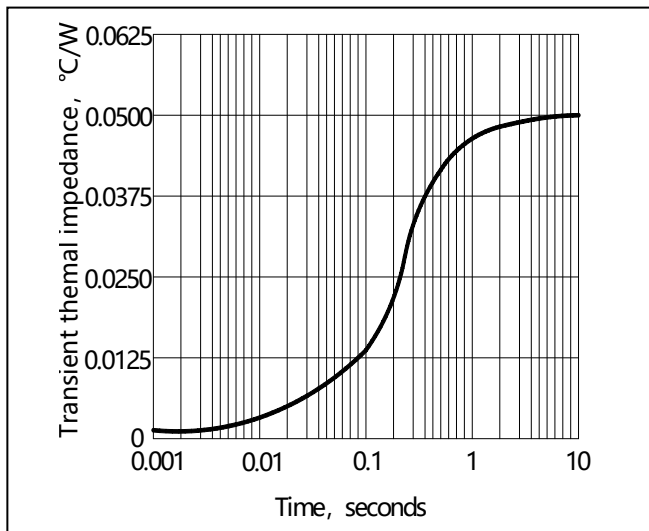


Fig3. Transient thermal impedance

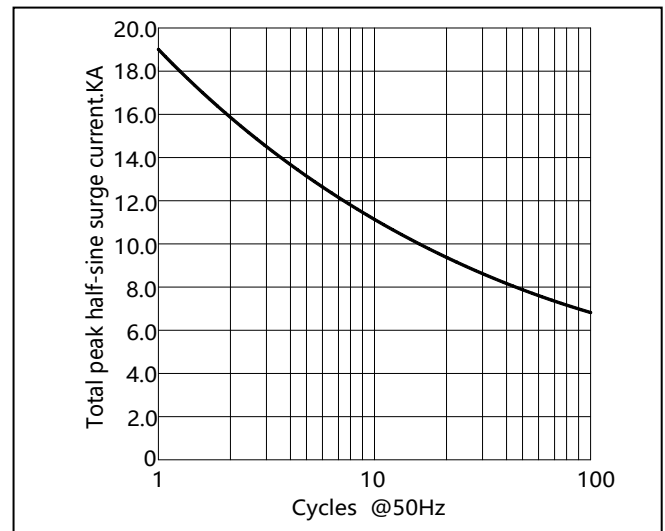


Fig4. Max Non-Repetitive Forward Surge Current

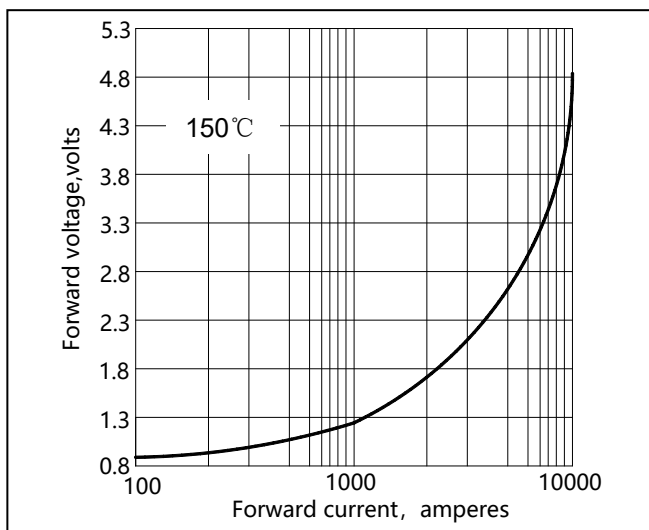
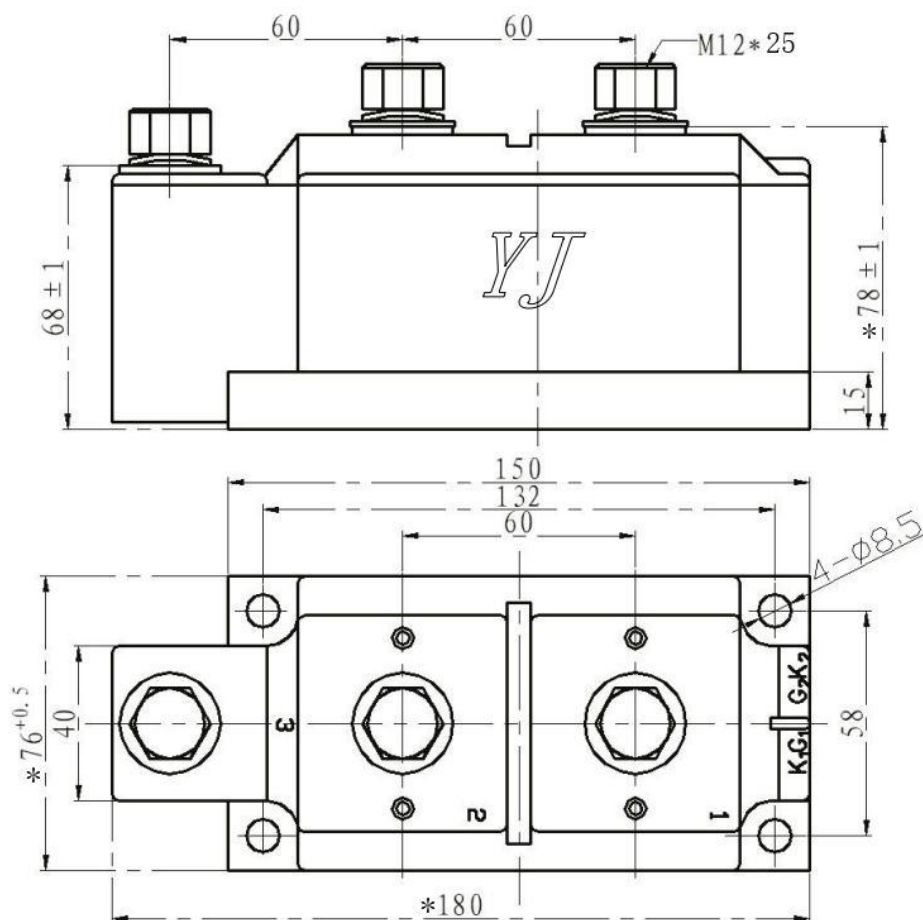


Fig5. Forward Characteristics

CASE: D8



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



Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function, or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <http://www.21yangjie.com>, or consult your nearest Yangjie's sales office for further assistance.