

STANDARD RECTIFIER MODULE

(MDC, MDA, MDK, MDX)



Features

- Electrical insulation between the chip and the backplane with insulation voltage 2500VAC
- International standard package
- "Vacuum + hydrogenation protection" welding technology
- Crimp style structure, excellent thermal cycling and power cycle capability
- If the current is below 350A, the module is cooled by forced air cooling; if the current is more than 400A, the cooling method can be either air-cooling or water-cooling.
- Easy to install, easy to apply and maintain
- Compact dimensions and low weight

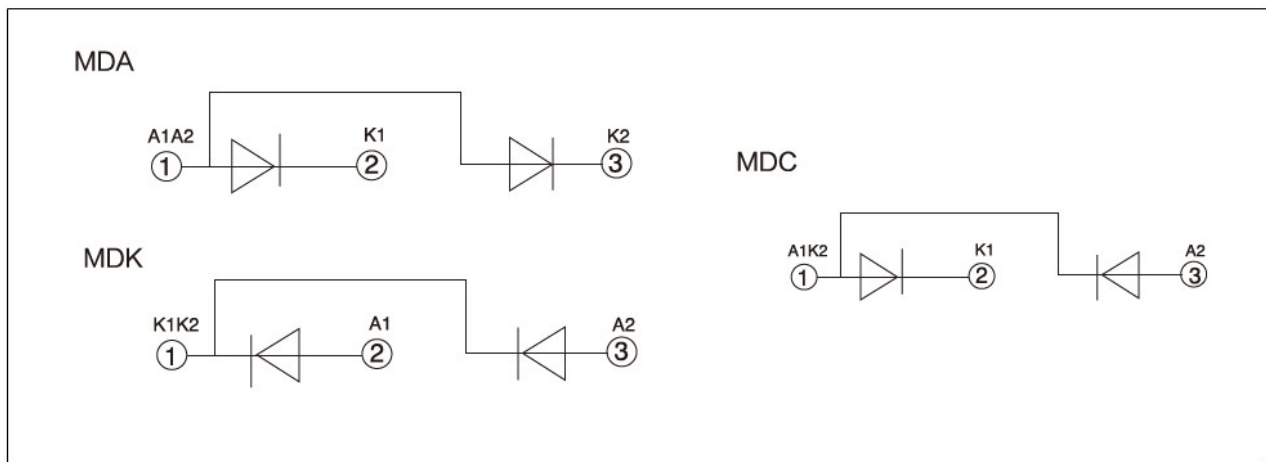
Product description

- $V_{DSM}/V_{RSM}=V_{DRM}/V_{RRM}+200V$
- Unless otherwise stated, I_{GT} , V_{GT} , I_H , V_{TM} , and V_{ISO} are all tested at 25 °C, and other parameters in the table are tested at T_{jm} .
- $I^2t=I^2_{TSM} \times t_w/2$; In the formula, t_w =half period of sinusoidal current. If the frequency is 50Hz, $I^2t=0.005I^2_{TSM}$ (Amps² sec)

Typical application

- Control system of AC and DC motor
- Various rectification power supplies
- **Industrial heating control system**
- **Lighting system**
- Contactless switch
- Motor soft start
- Static var compensator
- Welding machine
- Frequency converter
- UPS power supply
- Battery charging and discharging

Module model and circuit diagram



Product Specifications

Model	Average On-state Current	Maximum Repetitive Peak Off-state and Reverse Voltage	Maximum Peak On-state Voltage and Current		Maximum Repetitive Peak Off-state and Reverse Current	RMS Forward Current	Maximum Junction Temperature	Isolation Voltage	Overall Dimensions
	$I_{T(AV)}$	V_{DRM}, V_{RRM}	V_{TM}	I_{TM}	I_{DRM}, I_{RRM}	$I_{F(RMS)}$	T_{jm}	V_{isol}	
	A	V	V	A	mA	A	°C	V(AC)	
MDx 25A	25	400-2600	1.5	80	8	41	125	2500	101F
MDx 55A	55	400-2600	1.5	170	8	86	125	2500	101F
MDx 70A	70	400-2600	1.5	270	8	110	125	2500	201F
MDx 90A	90	400-2600	1.5	270	8	141	125	2500	201F
MDx 110A	110	400-2600	1.5	330	8	173	125	2500	301F
MDx 130A	130	400-2600	1.5	410	12	212	125	2500	301F
MDx 160A	160	400-2600	1.5	480	12	251	125	2500	301F
MDx 200A	200	400-2600	1.5	600	12	314	125	2500	401F-1
MDx 250A	250	400-2600	1.5	750	20	393	125	2500	401F-1
MDx 300A	300	400-2600	1.5	900	20	471	125	2500	401F-1
MDx 400A	400	400-2600	1.65	1000	40	640	125	2500	401F
MDx 500A	500	400-2600	1.65	1500	40	785	125	2500	401F
MDx 800A	800	400-2600	1.65	2400	40	785	125	2500	501F
MDx 1000A	1000	400-2600	1.65	3000	40	785	125	2500	701F
MDx 500A*	500	400-2600	1.65	1500	40	785	125	2500	801F
MDx 800A*	800	400-2600	1.65	2400	40	1256	125	2500	901F

Note: *

In the model column, MDx represents any one series of MDC, MDK, MDA, MDX, and MD.

The domestic models corresponding to the imported models RM, SKKD, DD, MDD, 2RL, 100L, etc., are subject to the circuit diagram.