

# WELDING MACHINE RECTIFIER MODULE

(MTG, MTY, MDG, MDY, MFG, MFY)



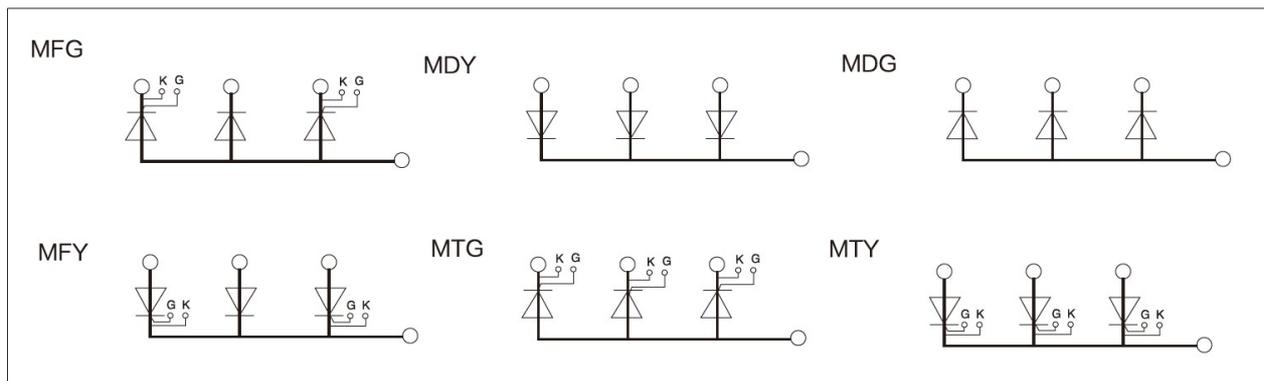
## Features

- The transistor is not insulated from the backplane, and the backplane is a common electrode
- International standard package
- "Vacuum + hydrogenation protection" welding technology
- Low forward voltage drop
- Maximum operating junction temperature up to 140 °C
- High surge current
- Crimp style structure, excellent thermal cycling and power cycle capability

## Typical application

- Welding machine power supply
- Various DC power supplies
- Frequency converter

## Module model and circuit diagram



## Product Specifications

NON-INSULATED THYRISTOR / RECTIFIER HYBRID MODULE											
Model	Average On-state Current	Maximum Repetitive Peak Off-state and Reverse Voltage	Maximum Repetitive Peak Off-state and Reverse Current	Maximum Peak On-state Voltage and Current	Gate Trigger Current	Gate Trigger Voltage	Holding Current	Rate Of Rise Of Off-state Voltage	Rate Of Rise Of On-state Current	Maximum Junction Temperature	Overall Dimensions

	$I_{T(AV)}$	$V_{DRM}$ , $V_{RRM}$	$I_{DRM}$ , $I_{RRM}$	$V_{TM}$	$I_{TM}$	$I_{GT}$	$V_{GT}$	$I_H$	dv/dt	di/dt	$T_{jm}$	
	A	V	mA	V	A	mA	V	mA	V/ $\mu$ s	A/ $\mu$ s	$^{\circ}$ C	
MTx 70A	70	400-2600	12	1.67	210	100	2.5	100	800	100	125	103B, 102B, 101B
MTx 110A	110	400-2600	12	1.67	330	100	2.5	100	800	100	125	103B, 102B, 101B
MTx 160A	160	400-2600	12	1.67	480	100	2.5	100	800	100	125	103B, 102B, 101B
MTx 200A	200	400-2600	20	1.70	600	150	2.5	100	800	100	125	104B
MTx 250A	250	400-2600	20	1.70	750	150	2.5	100	800	100	125	104B
MTx 300A	300	400-2600	25	1.70	900	150	2.5	100	800	100	125	104B
NON-INSULATED RECTIFIER MODULE												
Model	Average Forward Current	Maximum Repetitive Peak Reverse Voltage	Maximum Repetitive Peak Reverse Current	Maximum Peak On- state Voltage and Current		RMS Forward Current	Maximum Junction Temperature	Overall Dimensions				
	$I_{F(AV)}$	$V_{RRM}$	$I_{RRM}$	$V_{TM}$	$I_{TM}$	$I_{F(RMS)}$	$T_{jm}$					
	A	V	mA	V	A	A	$^{\circ}$ C					
MDx 70A	70	400-2600	12	1.57	210	157	150	201F, 101B				
MDx 110A	110	400-2600	12	1.57	330	157	150	201F, 101B				
MDx 160A	160	400-2600	12	1.57	480	236	150	103B, 102B, 101B				
MDx 200A	200	400-2600	20	1.60	600	314	150	104B				
MDx 250A	250	400-2600	20	1.60	750	393	150	104B				
MDx 300A	300	400-2600	25	1.60	900	471	150	104B				

Note: The MTx, MDx in the model column indicates any one series of MTG, MTY, MDG, MDY, MFG and MFY.