

# MDG250 MDY250

## Diode Modules(Non-isolated type)

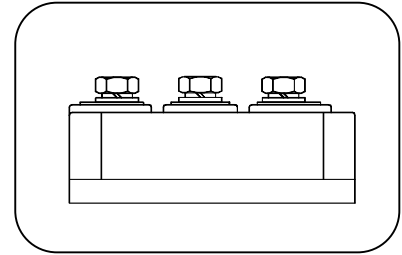
### Features:

- n Non-Isolated. Mounting base as common anode cathode terminal.
- n Pressure contact technology with Increased power cycling capability
- n Low forward voltage drop

### Typical Applications

- n Welding Power Supply
- n Various Dc power supplies.

$I_{F(AV)}$       **250 A**  
 $V_{RRM}$         **800~1800 V**  
 $I_{FSM}$           **$9.8 A \times 10^3$**   
 $I^2t$              **$490 A^2 S \cdot 10^3$**



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>J</sub> (°C)	VALUE			UNIT
				Min	Type	Max	
I <sub>F(AV)</sub>	Mean forward current	180° half sine wave 50Hz Single side cooled, T <sub>C</sub> =100°C	150			250	A
I <sub>F(RMS)</sub>	RMS forward current		150			393	A
V <sub>RRM</sub>	Repetitive peak reverse voltage	V <sub>RRM</sub> tp=10ms V <sub>RSM</sub> = V <sub>RRM</sub> +200V	150	800		1800	V
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub>	150			20	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave	150			9.80	KA
I <sup>2</sup> t	I <sup>2</sup> T for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>					490.0
V <sub>FO</sub>	Threshold voltage		150			0.80	V
r <sub>F</sub>	Forward slop resistance						0.87
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =750A	25			1.53	V
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	Single side cooled				0.150	°C /W
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink	Single side cooled				0.04	°C /W
F <sub>m</sub>	Terminal connection torque (M8)				12		N·m
	Mounting torque (M6)				6		N·m
T <sub>stg</sub>	Stored temperature			-40		125	°C
W <sub>t</sub>	Weight				680		g
Outline	404F4						

Peak forward Voltage Vs. Peak forward Current

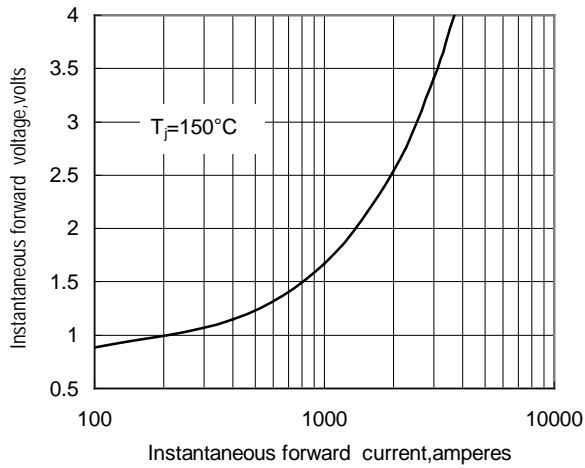


Fig.1

Max. junction To case Thermal Impedance Vs. Time

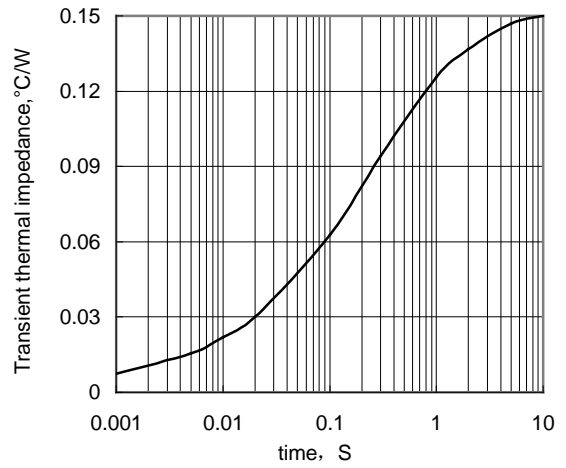


Fig.2

Max. Power Dissipation Vs. Mean forward Current

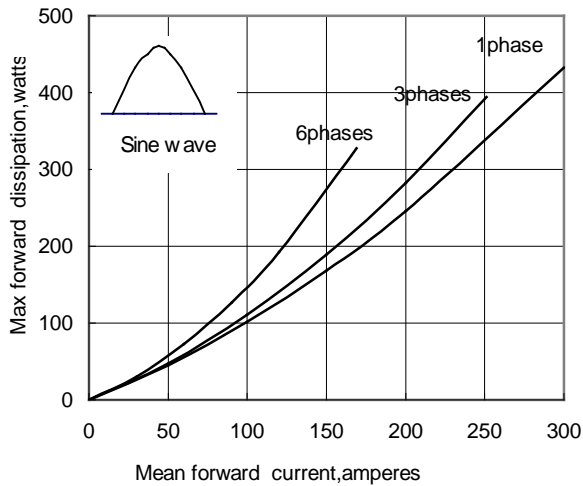


Fig.3

Max. case Temperature Vs. Mean forward Current

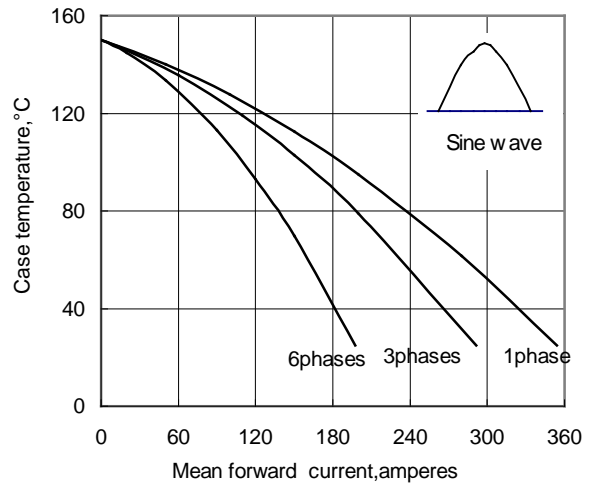


Fig.4

Max. Power Dissipation Vs. Mean forward Current

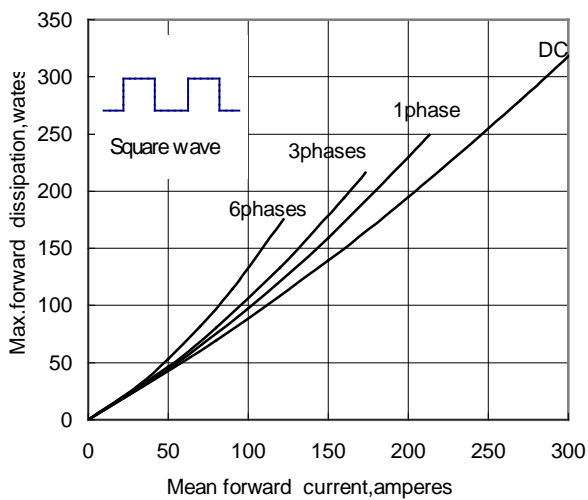


Fig.5

Max. case Temperature Vs. Mean forward Current

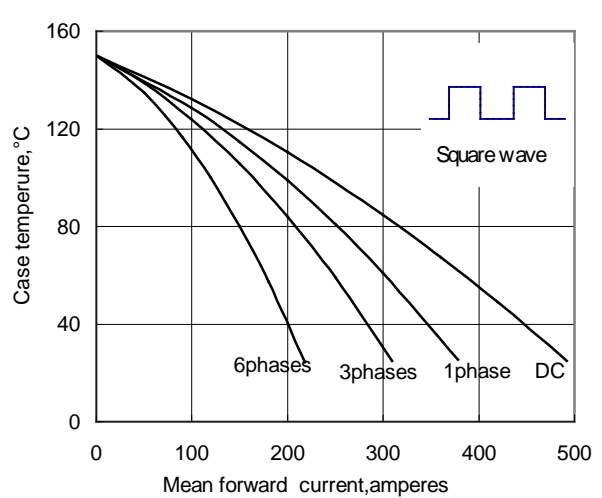


Fig.6

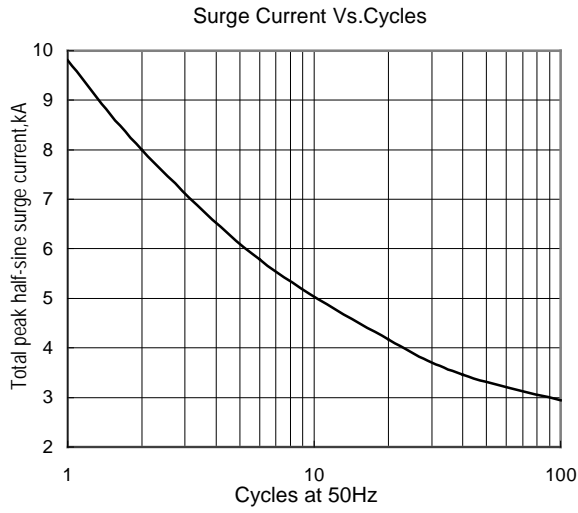


Fig.7

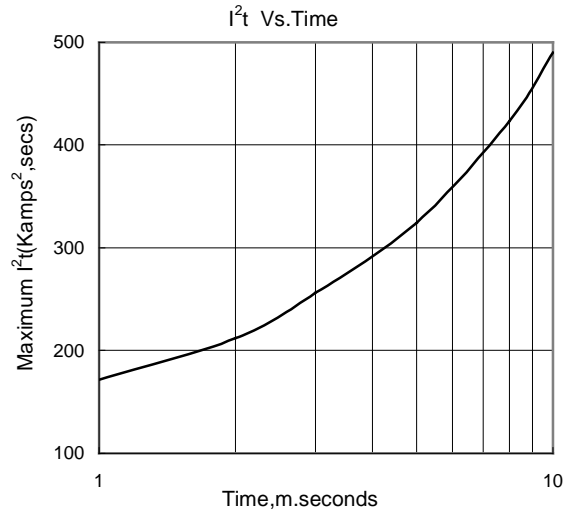
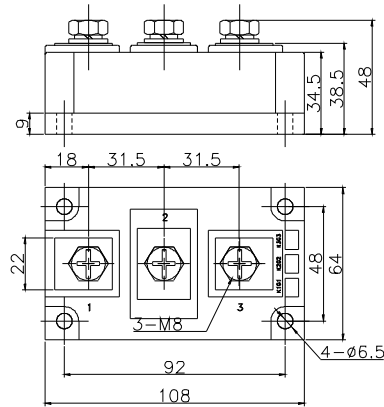


Fig.8

**Outline:**



**404F4**

