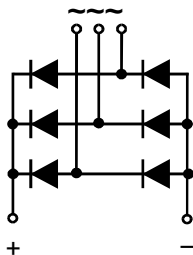


#### Feature

- International standard package
- Low forward voltage drop
- Isolation voltage 2500V~

#### Application

- DC power suppliers for apparatus device
- Input rectifying power supply for PWM converters
- Inverter welders



#### Maximum value

Symbol	Parameter	Rating						Unit	
		MDS250-06F	MDS250-08F	MDS250-10F	MDS250-12F	MDS250-14F	MDS250-16F		MDS250-18F
V <sub>RRM</sub>	Peak reverse repetitive voltage	600	800	1000	1200	1400	1600	1800	V
V <sub>RSM</sub>	Peak reverse non-repetitive voltage	700	900	1100	1300	1500	1700	1900	V

Symbol	Parameter	Test condition	Rating	Unit
I <sub>o</sub>	Output DC current	Three-phase whole wave rectifying circuit T <sub>c</sub> :100°C	250	A
I <sub>FSM</sub>	Forward surge current	t=10ms,50HZ,sin,T <sub>jm</sub>	3600	A
I <sup>2</sup> t	I <sup>2</sup> t value	V <sub>R</sub> = 0.6V <sub>RRM</sub> , T <sub>jm</sub>	64800	A <sup>2</sup> S
V <sub>ISO</sub>	Isolation voltage	AC one min	2500	V
T <sub>j</sub>	Operating junction temperature		-40 to +150	°C
T <sub>jm</sub>	Rated junction temperature		150	°C
T <sub>stg</sub>	Storage temperature		-40 to +125	°C
M <sub>d</sub>	Mounting torque (copper plate) M6		5±15%	N·m
	Mounting torque (terminal) M6 M8		5±15% 7±15%	N·m
W <sub>t</sub>	weight		580	g

#### Electrical characteristics

Symbol	Parameter	Test condition	Rating	Unit
I <sub>RRM</sub>	Peak reverse repetitive current	Single-side heat dissipation, V <sub>R</sub> =V <sub>RRM</sub> , sine half wave, T <sub>j</sub> =150°C	10	mA
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =400A, T <sub>j</sub> =25°C	1.1	V
R <sub>th(j-c)</sub>	Thermal impedance (junction-case)	Single-side heat dissipation, sine half wave	0.18	°C/W

### Performance Curves

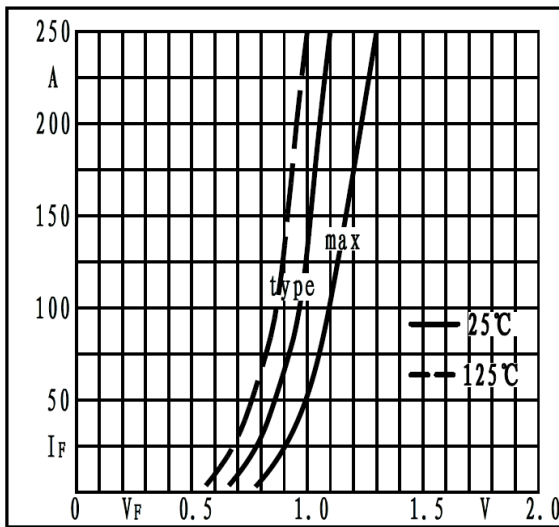


Fig1. Forward characteristics

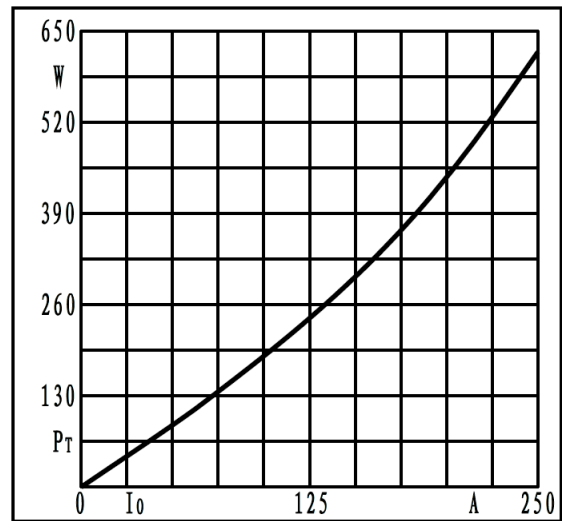


Fig2. Power dissipation

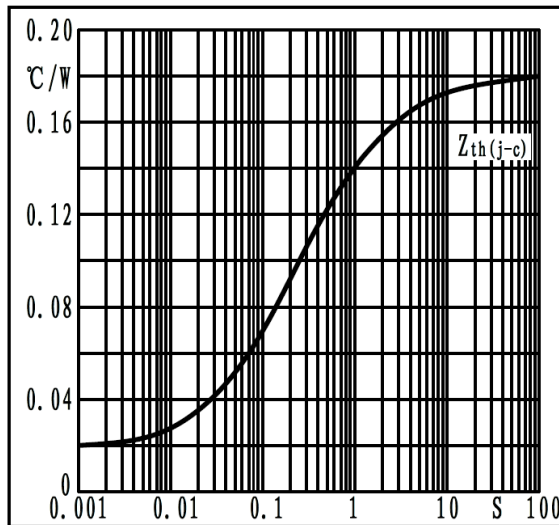


Fig3. Transient thermal impedance

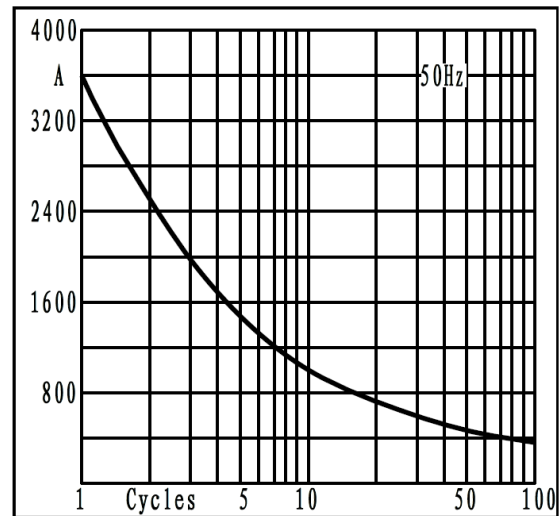


Fig4. Max non-repetitive forward surge current

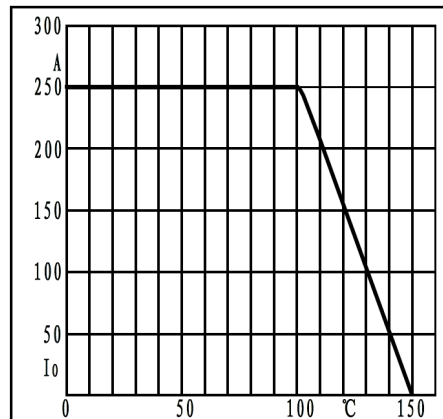


Fig5. Forward current derating curve

### Dimension

