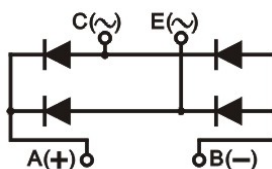


#### Feature

- 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
		MDQ150 -12	MDQ150 -16	
VRRM	Peak reverse repetitive voltage	1200	1600	V
VRSM	Peak reverse non-repetitive voltage	1300	1700	V

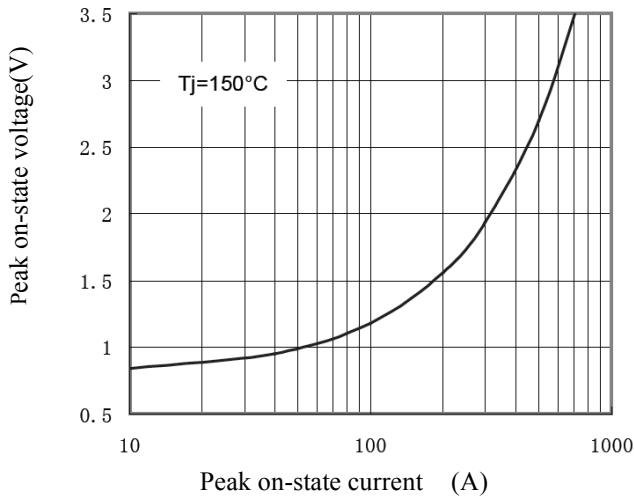
Symbol	Parameter	Test condition	Rating	Unit
I <sub>o</sub>	Output DC current	Single-phase whole wave rectifying circuit T <sub>c</sub> :100 °C	150	A
I <sub>FSM</sub>	Forward surge current	t=10ms,50Hz,sin,T <sub>jm</sub>	2100	A
I <sup>2</sup> t	I <sup>2</sup> t value	V <sub>R</sub> = 0.6V <sub>RRM</sub> , T <sub>jm</sub>	22100	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 +150	°C
M <sub>d</sub>	Mounting torque (copper plate) M6		5±15%	N·M
	Mounting torque (terminal) M6		5±15%	N·M
W <sub>t</sub>	weight		320	g

#### Electrical characteristics

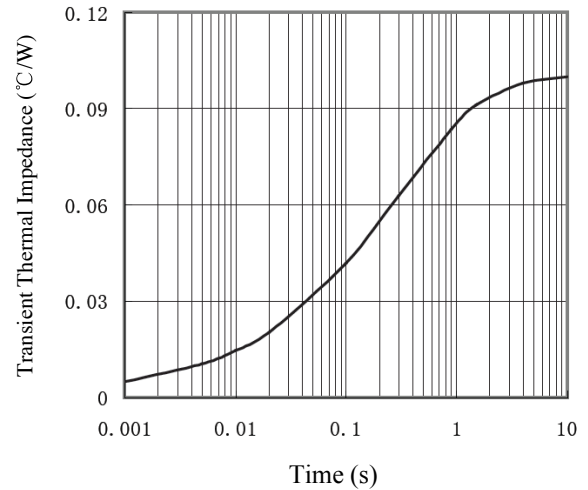
Symbol	Parameter	Test condition	Rating	Unit
I <sub>RRM</sub>	Peak reverse repetitive current	Single-side heat dissipation, V <sub>R</sub> =V <sub>RRM</sub> , sine half wave, T <sub>j</sub> =150 °C	15	mA
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =200A, T <sub>j</sub> =25 °C	1.38	V
R <sub>th(j-c)</sub>	Thermal impedance (junction-case)	Single-side heat dissipation, sine half wave	0.1	°C/W

## Performance Curves

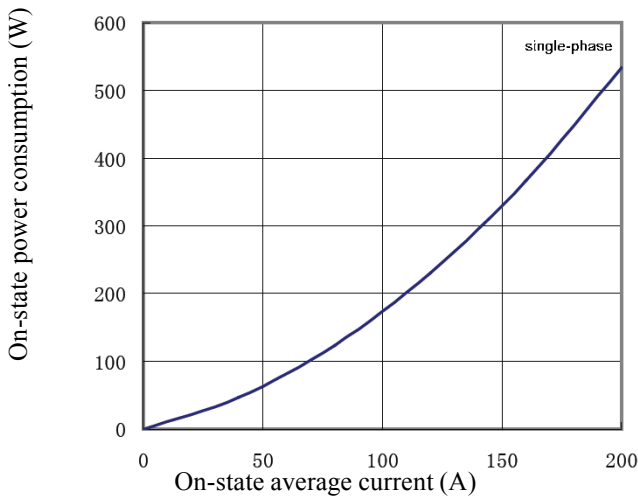
Forward current vs. Forward voltage



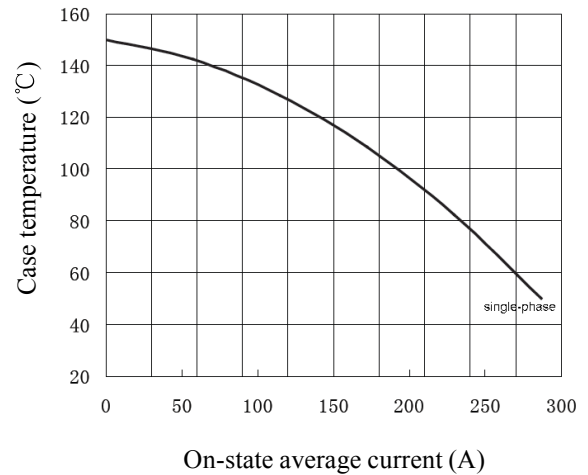
Thermal Impedance (junction to case)



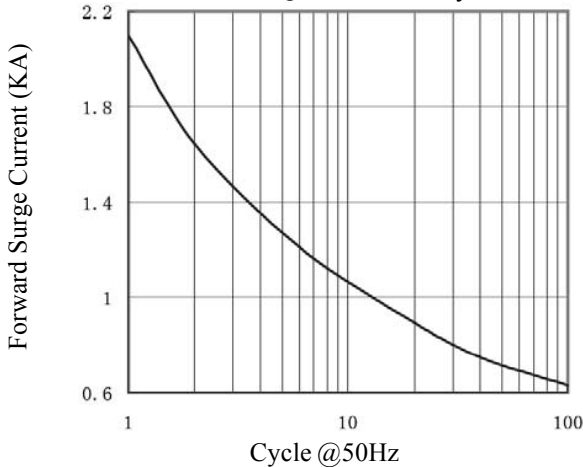
Power Consumption vs. Average Current



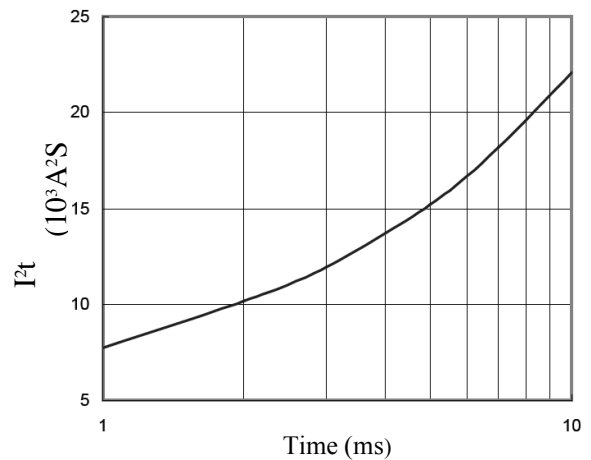
Case Temperature vs. O-state Average Current



Forward Surge Current vs. Cycle



$I^2t$  Characteristics



### Dimension

