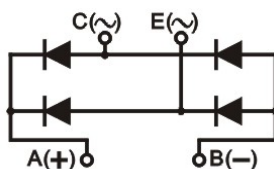


Feature

- 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
		MDQ200 -12	MDQ200 -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 _o	Output DC current	Single-phase whole wave rectifying circuit T _c :100 °C	200	A
I _{FSM}	Forward surge current	t=10ms,50Hz,sin,T _{jm}	2600	A
I ² t	I ² t value	V _R = 0.6V _{RRM} , T _{jm}	33800	A ² S
V _{ISO}	Isolation voltage	AC one min	2500	V
T _j	Operating junction temperature		-40 to +150	°C
T _{jm}	Rated junction temperature		150	°C
T _{stg}	Storage temperature		-40 to +150	°C
M _d	Mounting torque (copper plate) M6		5±15%	N·M
	Mounting torque (terminal) M6		5±15%	N·M
W _t	weight		320	g

Electrical characteristics

Symbol	Parameter	Test condition	Rating	Unit
I _{RRM}	Peak reverse repetitive current	Single-side heat dissipation, V _R =V _{RRM} , sine half wave, T _j =150 °C	8	mA
V _{FM}	Peak forward voltage	I _{FM} =200A, T _j =25 °C	1.2	V
R _{th(j-c)}	Thermal impedance (junction-case)	Single-side heat dissipation, sine half wave	0.2	°C/W

Performance Curves

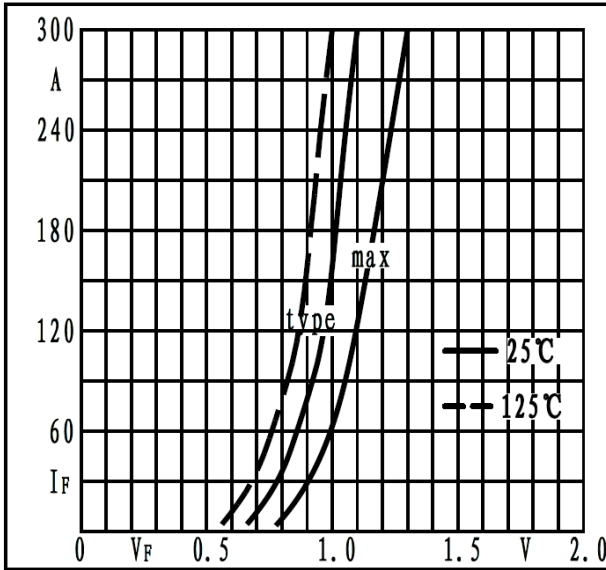


Fig1. Forward characteristics

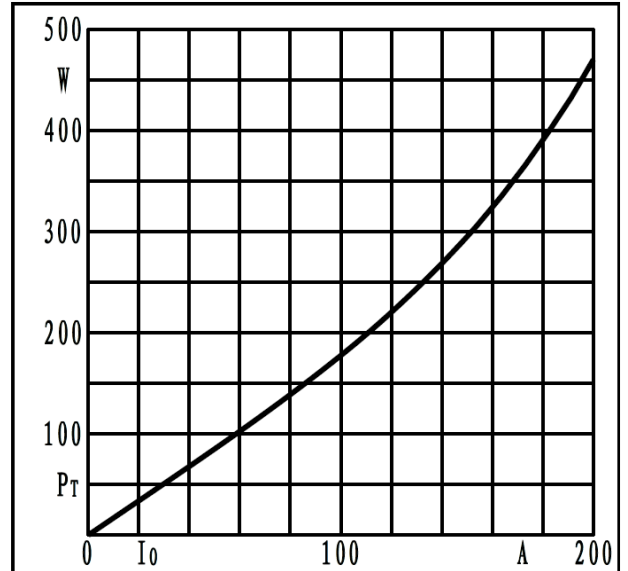


Fig2. Power dissipation

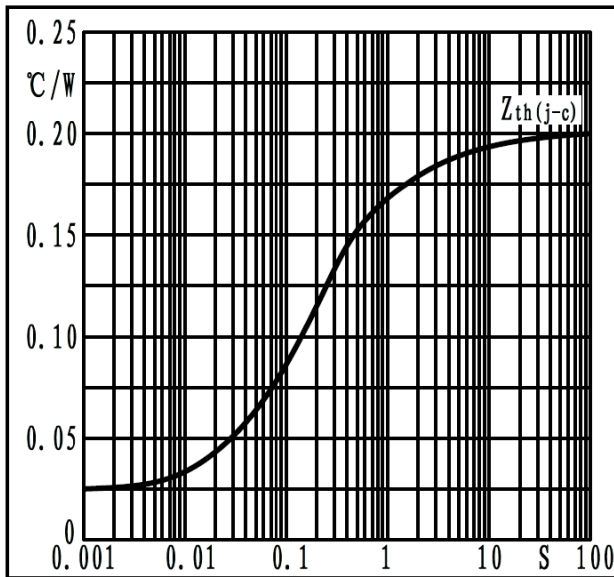


Fig3. Transient thermal impedance

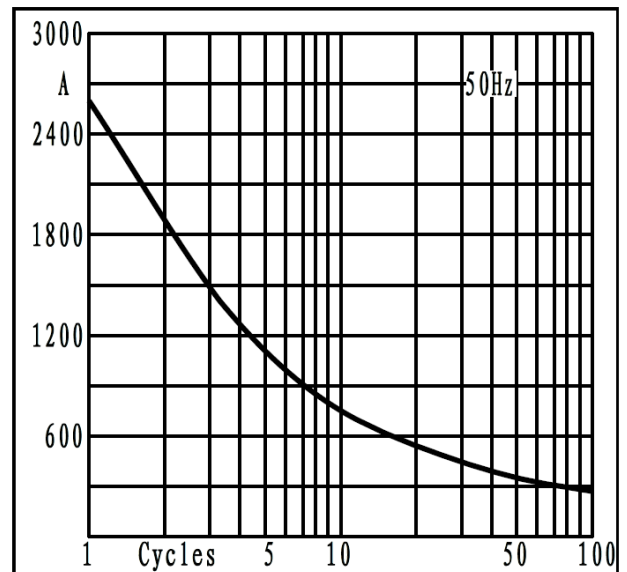


Fig4. Max non-repetitive forward surge current

Performance Curves

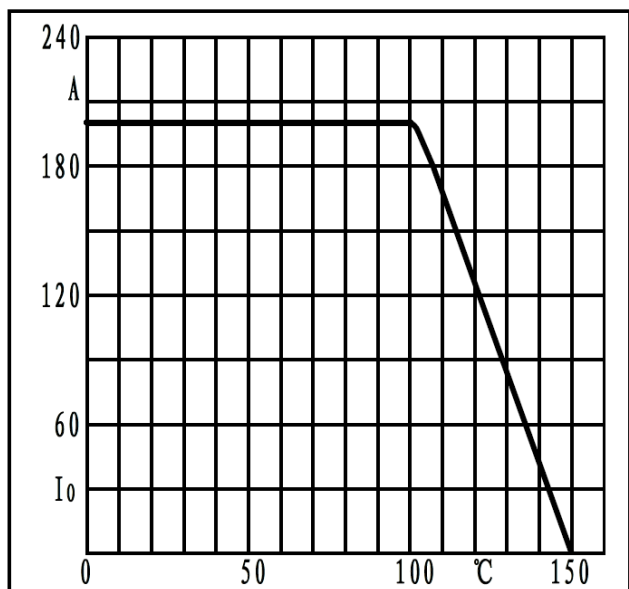


Fig5. Forward current derating curve

Dimension

