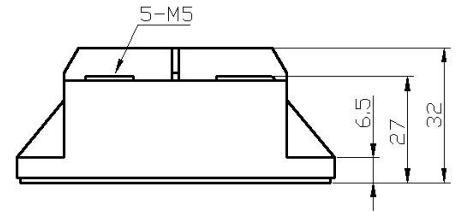


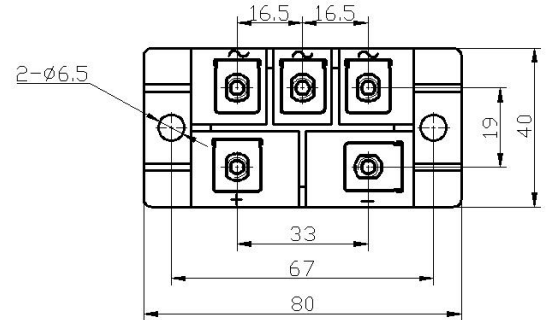
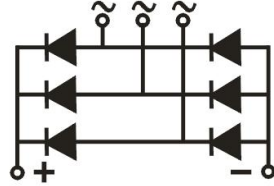
Feature

- 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
		MDS50 -12	MDS50 -16	
V _{RRM}	Peak reverse repetitive voltage	1200	1600	V
V _{RSM}	Peak reverse non-repetitive voltage	1300	1700	V

Symbol	Parameter	Test condition	Rating	Unit
I _O	Output DC current	Three-phase whole wave rectifying circuit, T _C =100°C	50	A
I _{FSM}	Forward surge current	t=10ms, 50HZ, sin, T _{jm}	750	A
I ² t	I ² t value	V _R = 0.6V _{RRM} , T _{jm}	2800	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 +125	°C
R _{th(j-c)}	Thermal impedance (junction-case)	Single-side heat dissipation, sine half wave	0.56	°C/W
M _d	Mounting torque (copper plate) M6		5±15%	N·m
	Mounting torque (terminal) M5		3±15%	N·m
W _t	weight		180	g

Electrical characteristics

Symbol	Parameter	Test condition	Rating			Unit
			Min	Typical	Max	
I _{RRM}	Peak reverse repetitive current	V _R =V _{RRM} , sine half wave, T _j =150°C	--	--	5	mA
V _{FM}	Peak forward voltage	I _{FM} =50A, T _j =25°C	--	1.00	1.20	V

Performance Curves

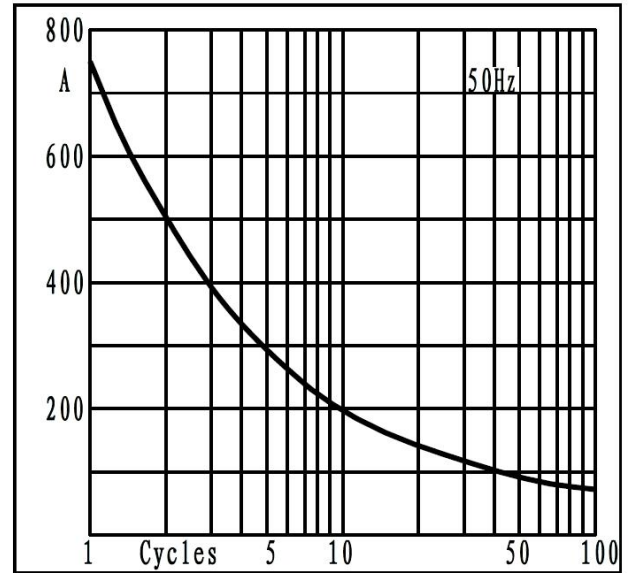
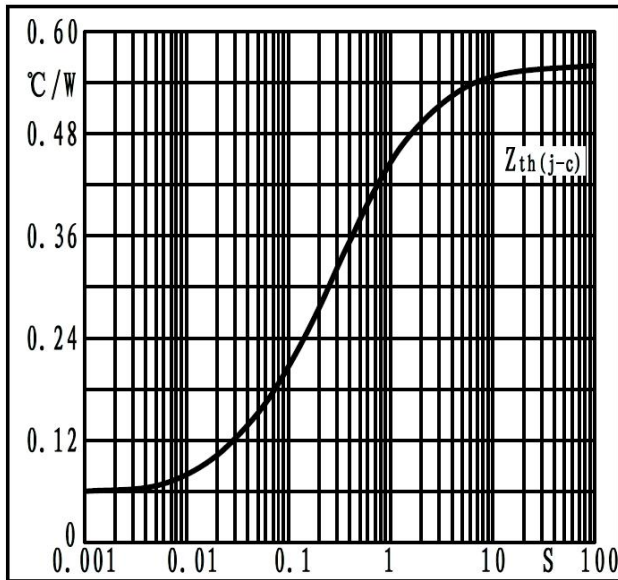
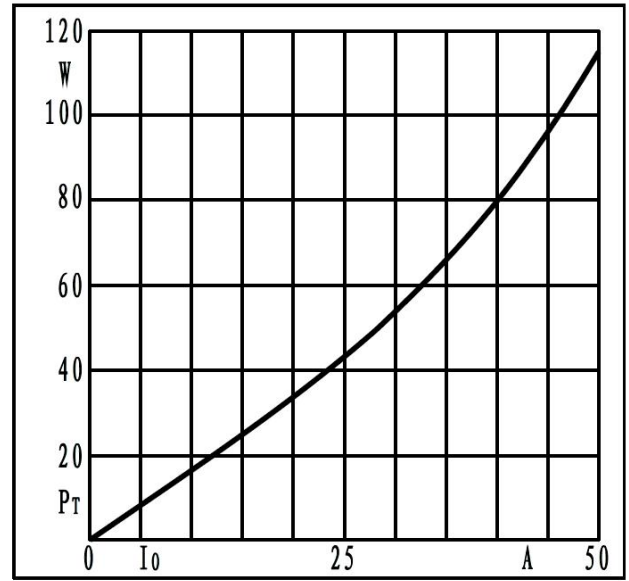
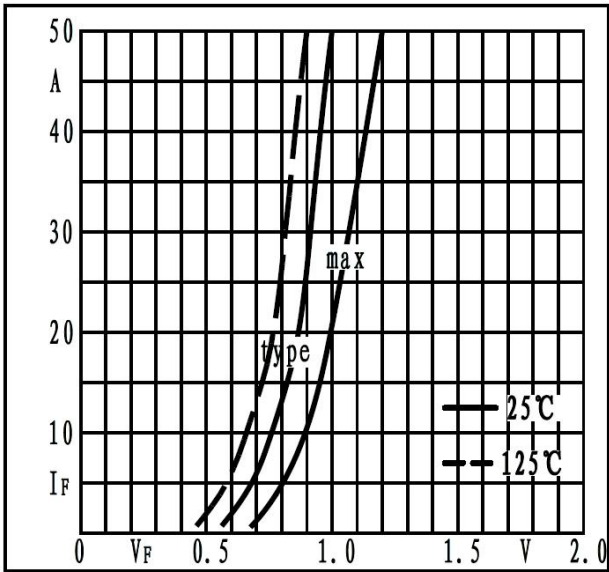


Fig3. Transient thermal impedance

Fig4. Max non-repetitive forward surge current

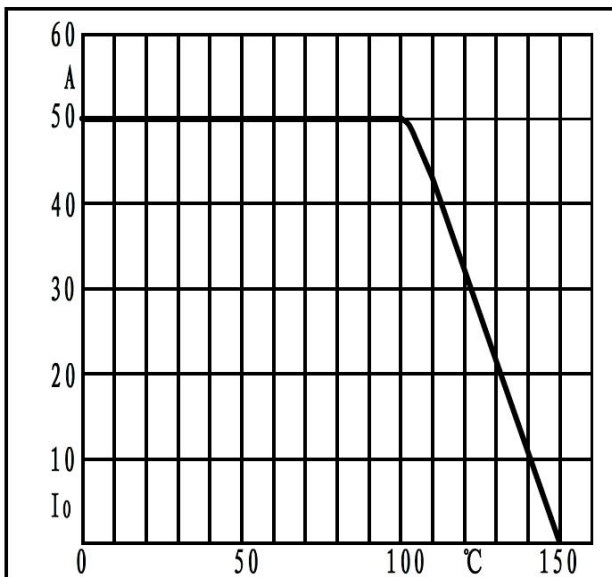


Fig5. Forward current derating curve