

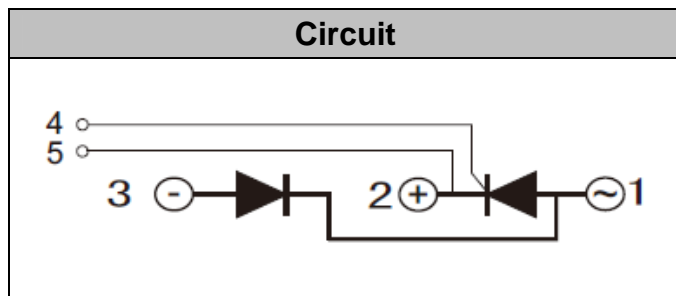


## Thyristor Modules

**V<sub>RRM</sub> / V<sub>DRM</sub>** 800 to 1800V  
**I<sub>TAV</sub>** 200A

### Applications

- Power Converters
- Lighting Control
- DC Motor Control and Drives
- Heat and temperature control



### Features

- International standard package
- High Surge Capability
- Simple Mounting

### Module Type

TYPE	V <sub>RRM</sub>	V <sub>RSM</sub>
MT200CB08T3	800V	900V
MT200CB12T3	1200V	1300V
MT200CB16T3	1600V	1700V
MT200CB18T3	1800V	1900V

### Maximum Ratings

Symbol	Conditions	Values	Units
I <sub>TAV</sub>	Sine 180° 50HZ; T <sub>c</sub> =85°C	200	A
I <sub>TSM</sub>	10ms half sinewave V <sub>R</sub> =60%V <sub>RRM</sub>	7.2	KA
i <sup>2</sup> t		264000	A <sup>2</sup> s
Visol	a.c.50HZ;r.m.s.;1min	2500	V
Tstg		-40 to 140	°C
Fm		4.5	N.m
Weight	Module(Approximately)	900	g

### Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	per module	0.14	°C/W



## Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
$V_{TM}$	$T=125^{\circ}C$ $I_{TM}=600A$			1.5	V
$V_{TO}$	$T=125^{\circ}C$			0.8	V
$V_{DRM}$ $V_{RRM}$	$V_{DRM}\&V_{RRM}$ $t_p=10ms$ $V_{DSM}\&V_{RSM}=V_{DRM}\&V_{RRM}+200V$	600		1600	V
$I_{RRM}$ $I_{DRM}$	At $V_{DRM}$ At $V_{RRM}$			30	mA
di/dt	From 67% $V_{DRM}$ To 600A, Gate source 1.5A $t_r \leq 0.5\mu s$ Repetitive			150	A/us
dv/dt	$V_{DM}=67\%V_{DRM}$			800	V/us
$V_{GT}$	$I_A=1A$ , $V_A=12V$	0.8		2.5	V
$I_{GT}$		30		180	mA
$I_H$	$T_{VJ}=25^{\circ}C$ , $V_D=12V$	20		100	mA
$V_{GD}$	At 67% $V_{DRM}$			0.2	V

## Performance Curves

Fig1. Power dissipation

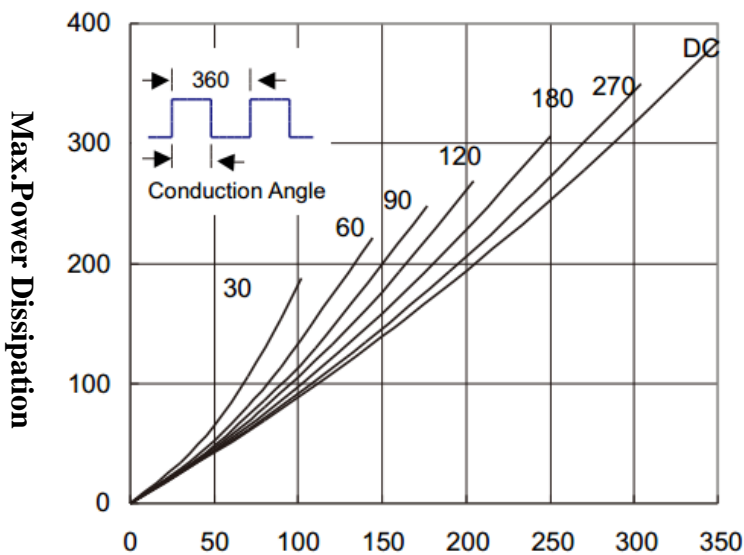


Fig2. Transient thermal impedance

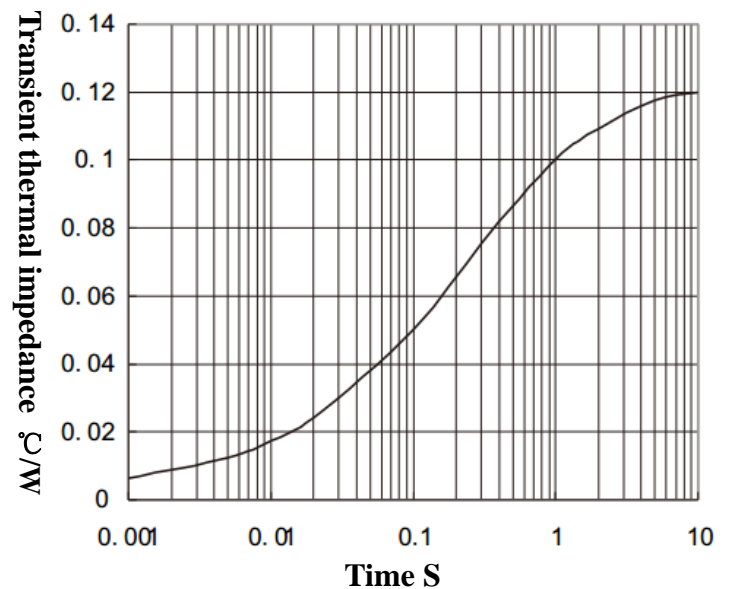


Fig3. Surge Current

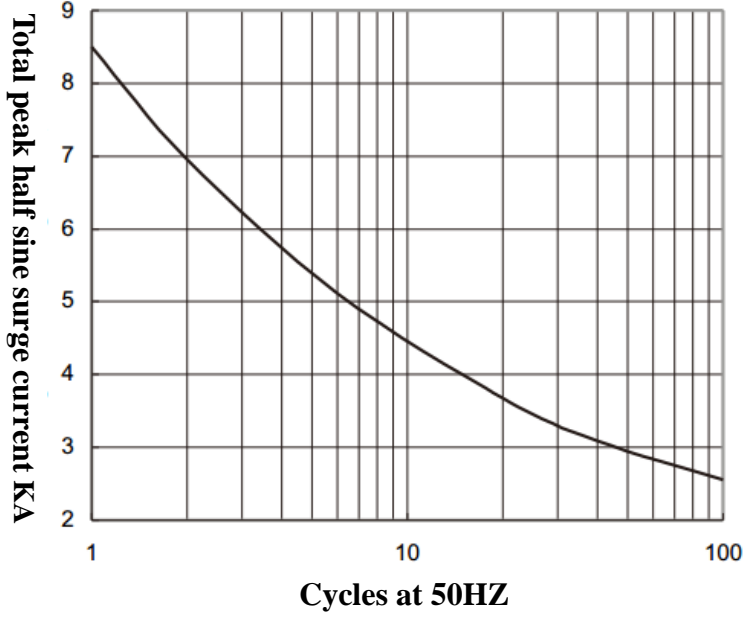
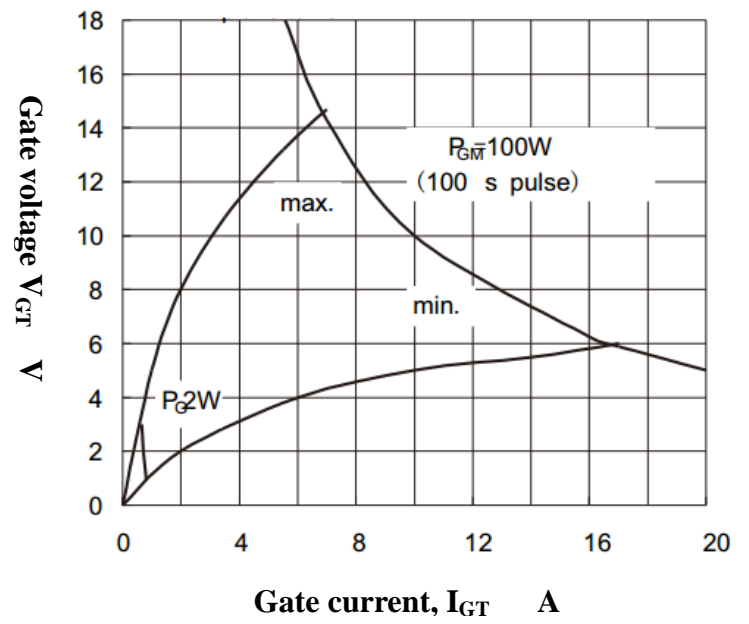
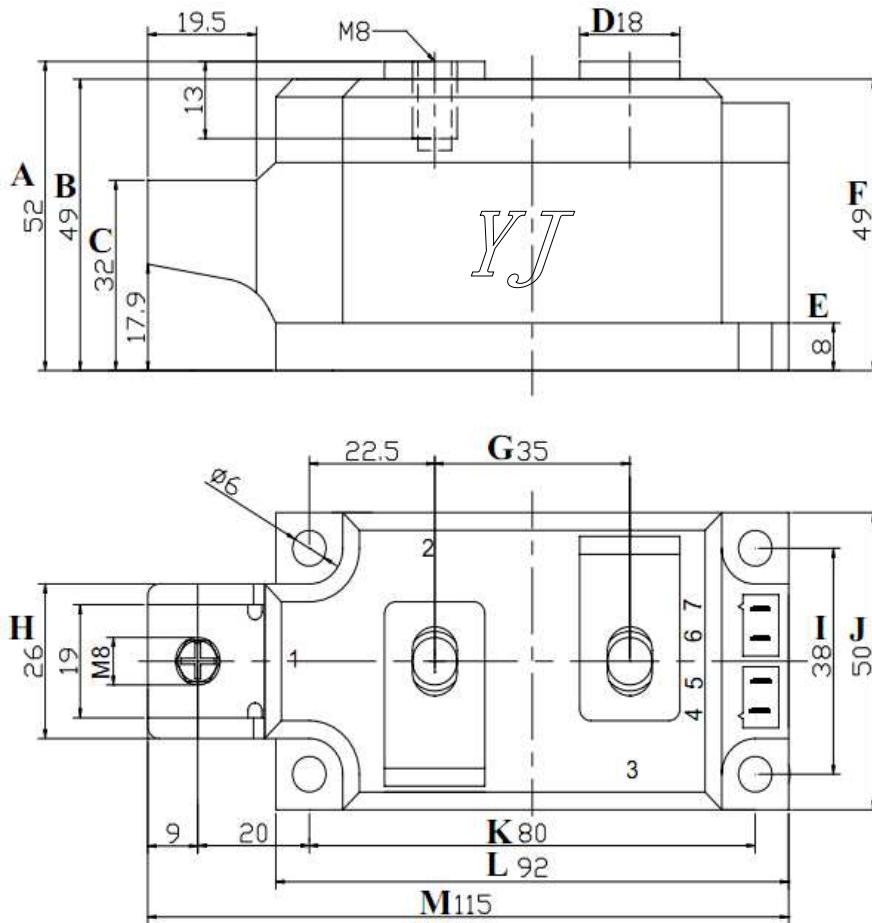


Fig4. Gate characteristic



Package Outline Information

CASE: T3



Dimensions in mm