HUAJING

MT、HSKET、HTZ1000AThyrisor Module

Feature

- Chips are electrically insulated from plate
- Package in complince wtih international stangard.Pressure type, excellent temperature characteristics and power cycling capability
- 350A below modules are forced air cooling,400A above modules Can be selected by air cooling or wayer cooling

$I_{T(AV)}$	1000A	
V_{DRM}/V_{RRM}	100-6500V	
I_{TSM}	20	KA
I^2t	2000	10^3a^2s

Typical application

- AC,DC motor control,Different king of rectifying power supply
- Industrial heating and control,Light adjustment,Non-contact switch
- Motor softstarter,Static reactive power compensation
- Welding equipment,Frequency transforment,UPS,Battery charging and discharging

SYMBOL	CHARCTERISTIC	TEST CONDITIONS	T_J (℃)	VALUE		UNIT
				Min	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wawe，50HZ Double side cooled，T_C=98℃	125		1000	A
$I_{T(RMS)}$	RMS current		125		1570	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repettive peak reverse voltage	V_{DRM}&V_{RRM} tp=10ms V_{DSM}&V_{RSM}=V_{DRM}&$V_{RRM+200}$	125	500	2500	V
I_{DRM} I_{RRM}	Repetitive peak current	V_{DM}=V_{DRM} V_{RM}=V_{RRM}	125		50	mA
I_{TSM}	Surge on-state current	10ms half sine wave V_R=0.6V_{RRM}	125		20.0	KA
I^2t	I^2t for fusing coordination				2000	$A^{2S*}10$
V_{TO}	Threshold voltage		125		0.80	V
r_T	On-state slop resistance				0.33	mΩ
V_{TM}	Peak on-state voltage	I_{TM}=3000A	25		1.20	V
dv/dt	Critical rate of rise of-state voltage	V_{DM}=0.67V_{DRM}	125		800	V/us
di/dt	Critical rate of rise of on-state current	V_{DM}=67%V_{DRM} TO 1000A, Gate pulse tr≤0.5us I_{GM}=1.5A	125		100	A/us
I_{GT}	Gate trigger current	V_A=12V,I_A=1A	25	30	200	mA
V_{GT}	Gate trigger voltage			0.8	3	V
I_H	Holding current			20	200	mA
V_{GD}	Npn-trigger gate voltage	V_{DM}=0.67V_{DRM}	125		0.2	V
$R_{th(j-c)}$	Thermal impedance node to the shell	180 ° sine wave, single heat sink			0.052	℃/W
$R_{th(c-h)}$	Thermal impedance (shell to powder)	180 ° sine wave, single heat sink			0.024	℃/W
V_{iso}	Insulantion voltage				2500	V
F_M	Mounting force（M5)				12	N-m
	Mounting force（M6)				6	N-m
T_{stq}	Stored temperature			-40	125	℃
W_t	Weight					g
Outline						

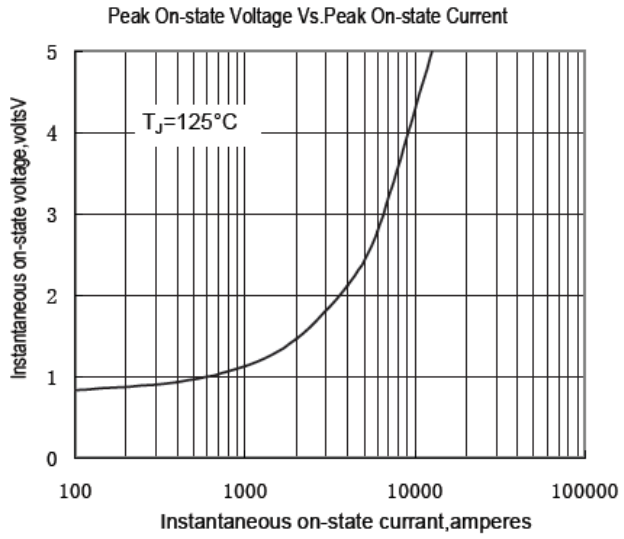


Fig.1

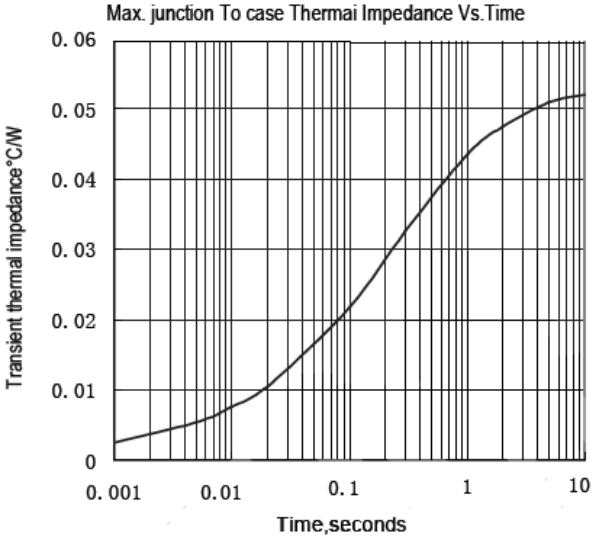


Fig.2

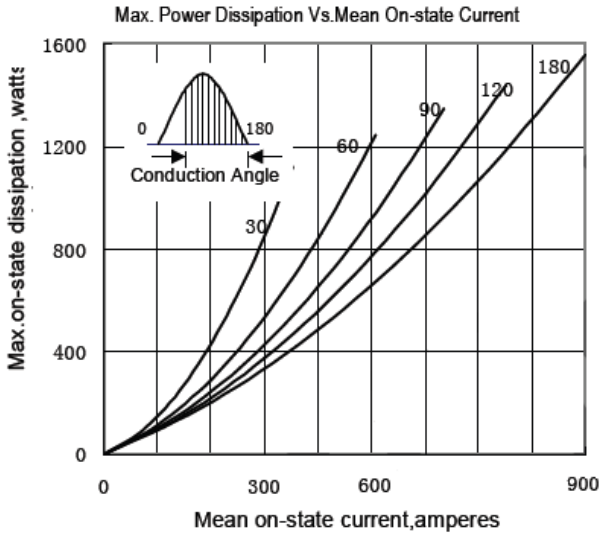


Fig.5

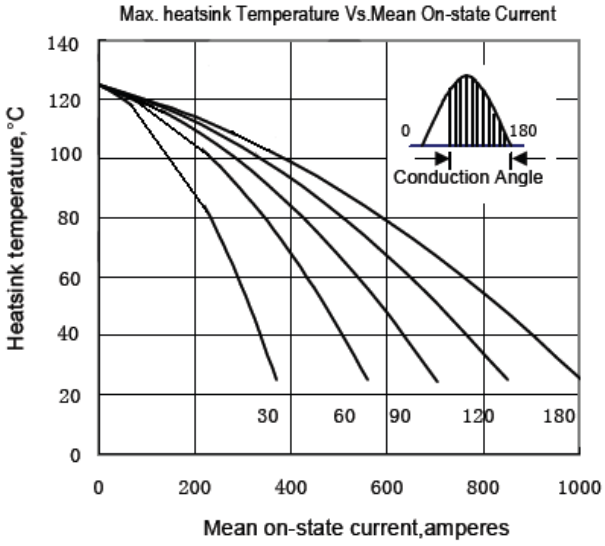


Fig.6

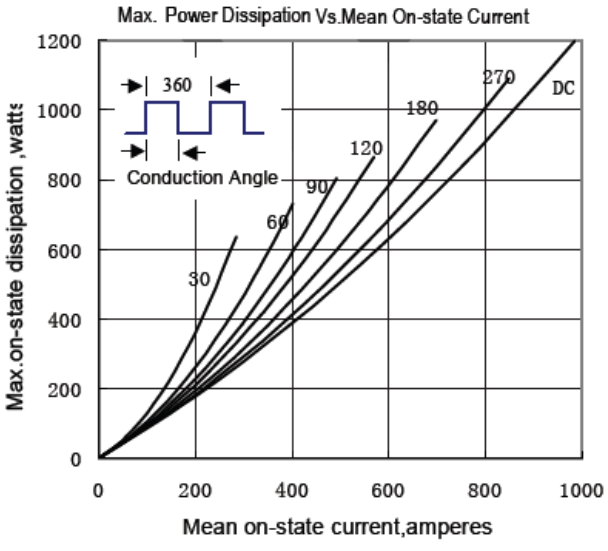


Fig.5

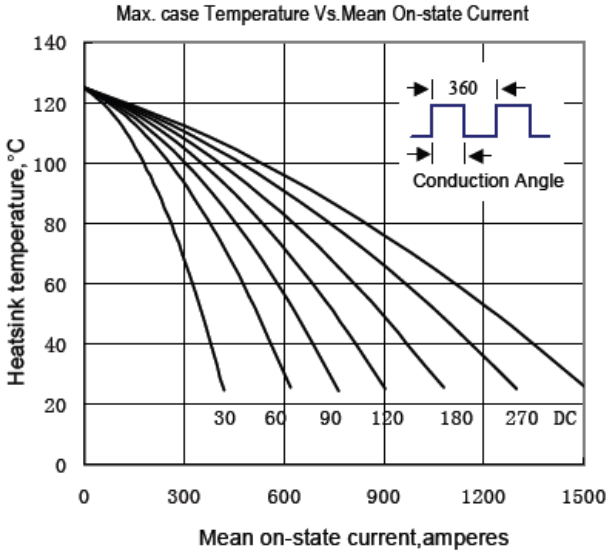


Fig.6

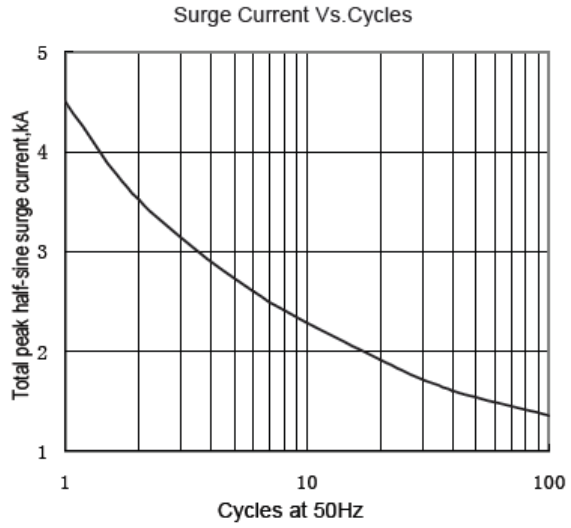


Fig.7

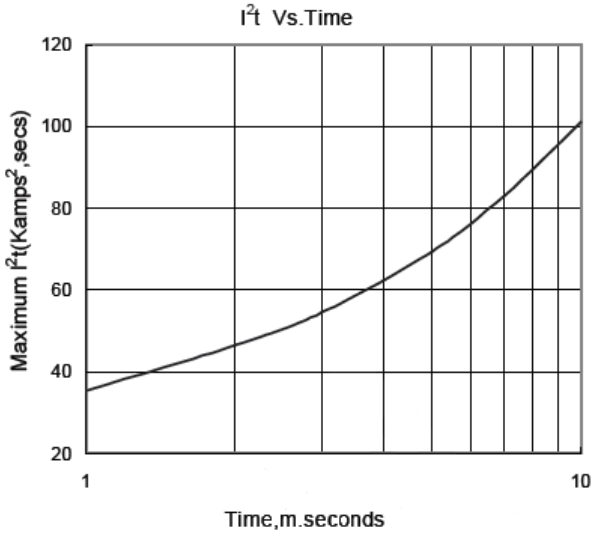


Fig.8

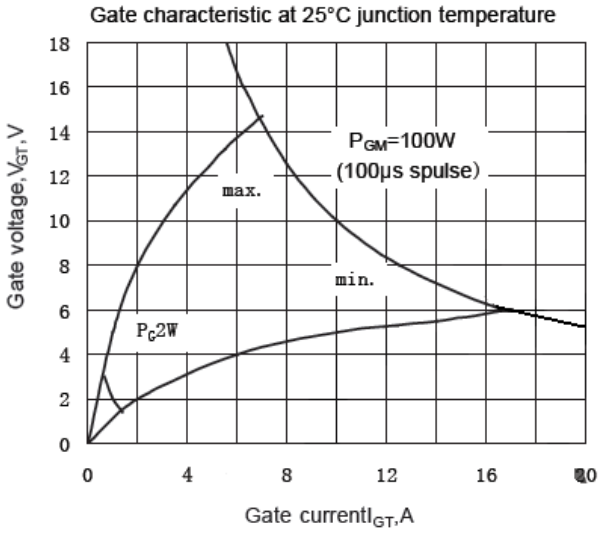


Fig.9

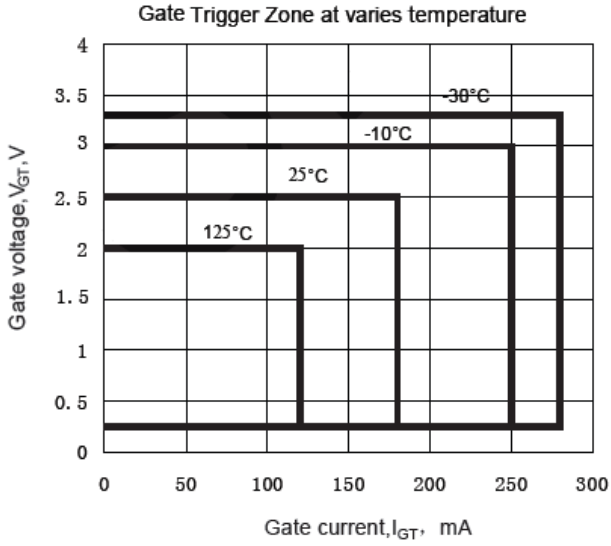
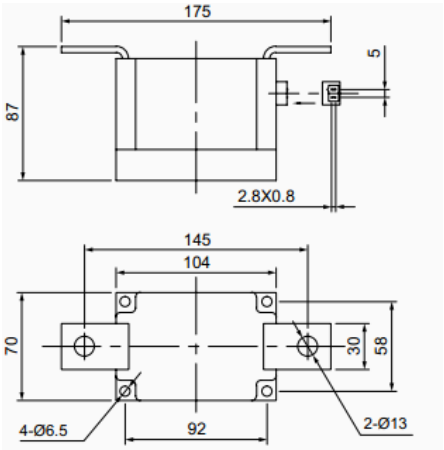


Fig.10

Outline:



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Circuit Drawing: