

MTC400 MTA400 MTK400 MTX400 MT400 Thyristor Modules

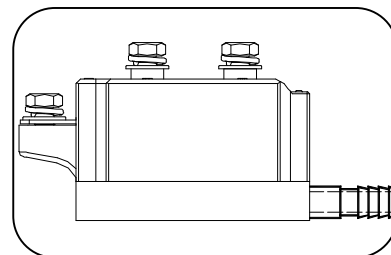
Features:

- n Isolated mounting base 2500V~
- n Pressure contact technology with Increased power cycling capability
- n Space and weight savings

Typical Applications

- n AC/DC Motor drives
- n Various rectifiers
- n DC supply for PWM inverter

$I_{T(AV)}$ **400A**
 V_{DRM}/V_{RRM} **600~1800V**
 I_{TSM} **$8.5A \times 10^3$**
 I^2t **$361A^2 S \cdot 10^3$**



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T _J (°C)	VALUE			UNIT
				Min	Type	Max	
I _{T(AV)}	Mean on-state current	180° half sine wave 50Hz Single side water cooled, T _c =55°C	125			400	A
I _{T(RMS)}	RMS on-state current		125			628	A
V _{DRM} V _{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V _{DRM} &V _{RRM} tp=10ms V _{DSM} &V _{RSM} = V _{DRM} &V _{RRM} +200V respectively	125	600		1800	V
I _{DRM} I _{RRM}	Repetitive peak current	at V _{DRM} at V _{RRM}	125			40	mA
I _{TSM}	Surge on-state current	10ms half sine wave	125			8.50	KA
I ² t	I ² T for fusing coordination	V _R =60%V _{RRM}					361
V _{TO}	Threshold voltage		125			0.80	V
r _T	On-state slop resistance						0.80
V _{TM}	Peak on-state voltage	I _{TM} =1200A	25			1.90	V
dv/dt	Critical rate of rise of off-state voltage	V _{DM} =67%V _{DRM}	125			800	V/μs
di/dt	Critical rate of rise of on-state current	I _{TM} =800A, Gate source 1.5A t _r ≤0.5μs Repetitive	125			100	A/μs
I _{GT}	Gate trigger current	V _A =12V, I _A =1A	25	30		200	mA
V _{GT}	Gate trigger voltage			1.0		3.0	V
I _H	Holding current			20		200	mA
V _{GD}	Non-trigger gate voltage	V _{DM} =67%V _{DRM}	125	0.2			V
R _{th(j-c)}	Thermal resistance Junction to case	Single side cooled				0.110	°C /W
V _{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I _{iso} :1mA(MAX)		2500			V
F _m	Thermal connection torque (M8)				12		N·m
	Mounting torque (M6)				6.0		N·m
T _{stg}	Stored temperature			-40		125	°C
W _t	Weight				1300		g
Outline	405F3						

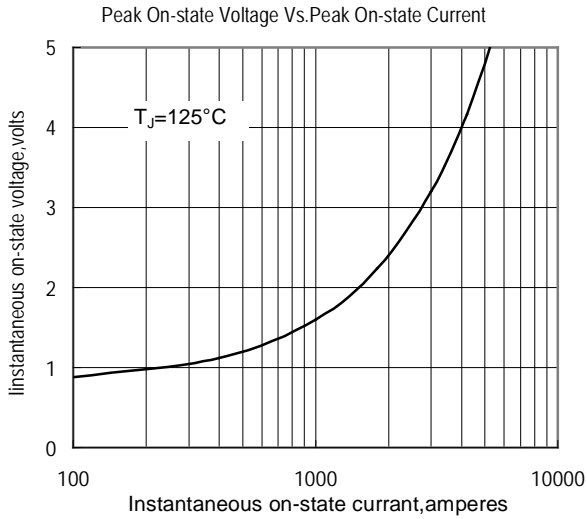


Fig.1

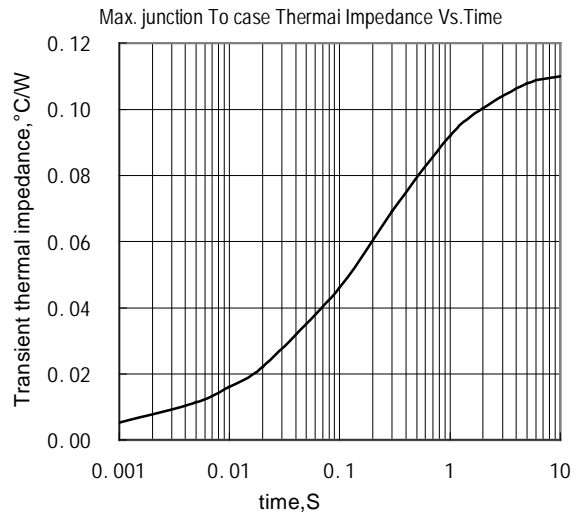


Fig.2

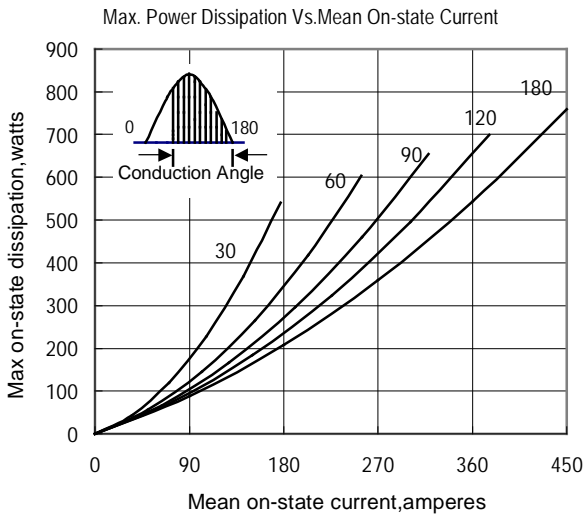


Fig.3

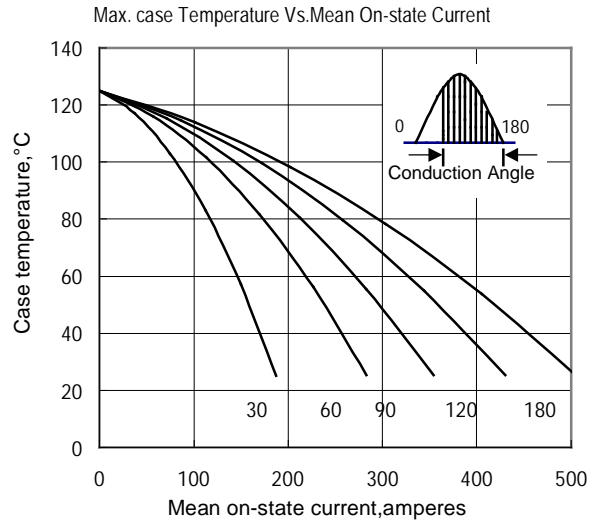


Fig.4

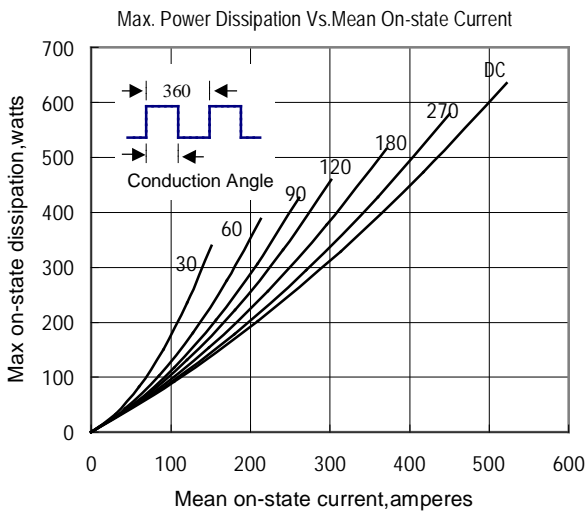


Fig.5

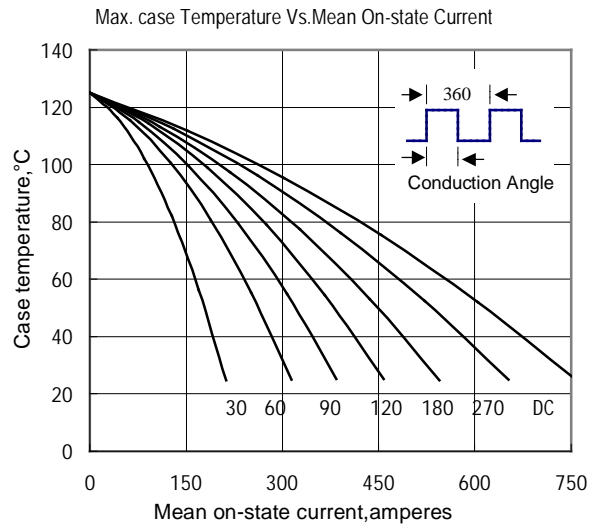


Fig.6

MTC400 MTA400 MTK400 MTX400 MT400

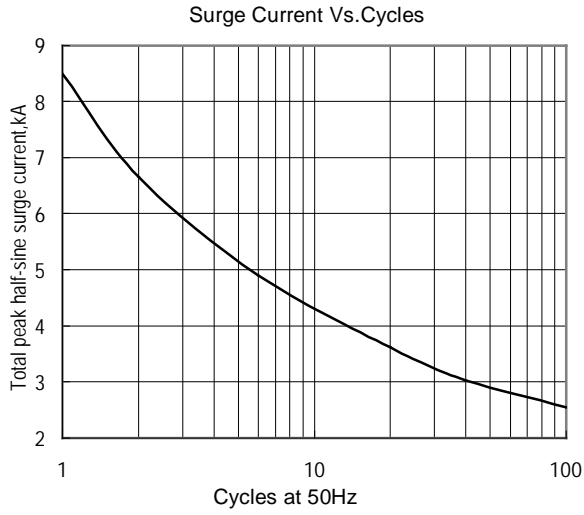


Fig.7

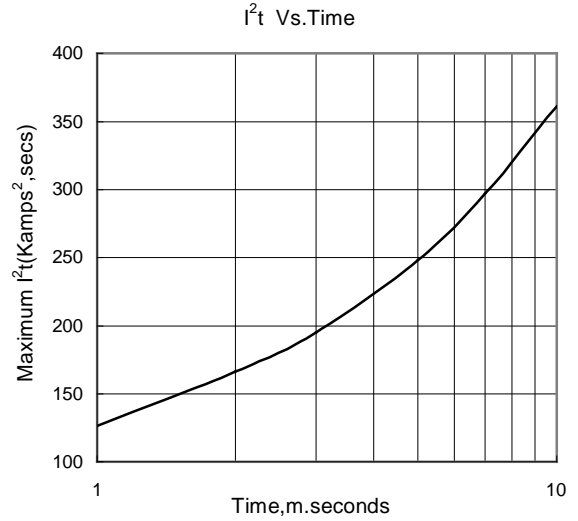


Fig.8

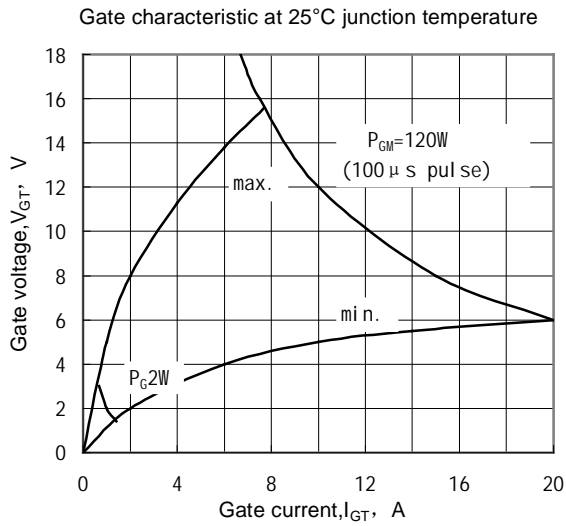


Fig.9

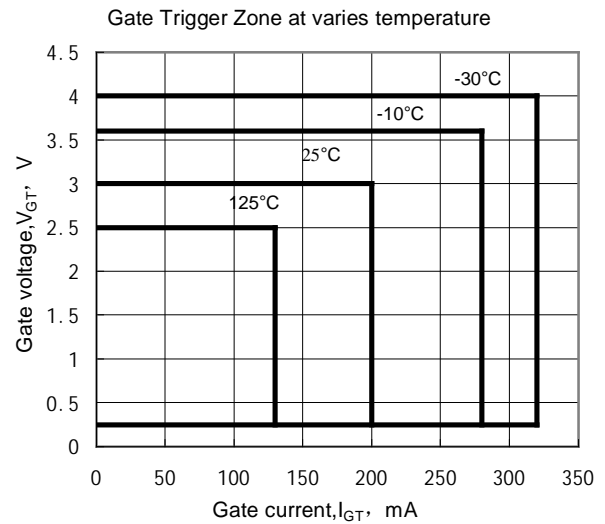
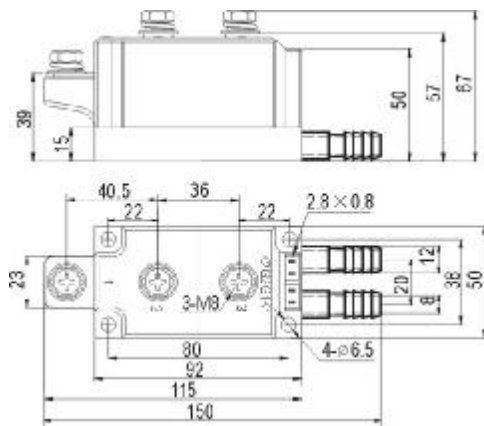


Fig.10

Outline:



405F3

