



MT1000C(A/K)-T9

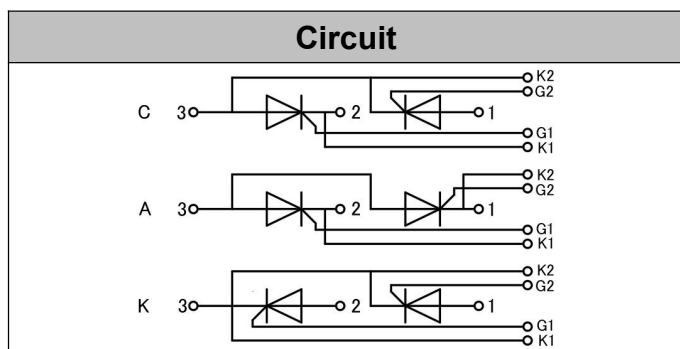


Thyristor Modules

VRRM / VDRM 3200 to 3500V
ITAV 1000A

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			VDRM/VRRM	VDSM/VRSM
MT1000C32T9	MT1000A32T9	MT1000K32T9	3200V	3400V
MT1000C34T9	MT1000A34T9	MT1000K34T9	3400V	3600V
MT1000C35T9	MT1000A35T9	MT1000K35T9	3500V	3700V

Maximum Ratings

Symbol	Conditions	Values	Units
ITAV	Sine 180°;Tc=55°C	1000	A
ITSM	Tvj=125°C t=10ms, sine	16000	A
i²t	Tvj=125°C t=10ms, sine	1280000	A²s
Visol	a.c.50HZ;r.m.s.;1min,Iiso :2mA(MAX)	4000	V
Tvj		-40 to 125	°C
Tstg		-40 to 125	°C
Mt	To terminals(M12)	14±15%	Nm
Ms	To heatsink(M8)	10±15%	Nm
di/dt	Tvj= TvJM ,IGM=1.5A tr≤1.5	100	A/us
dv/dt	Tj= TvJM ,2/3VDRM, linear voltage rise	1000	V/us
Weight	Module(Approximately)	4050	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	per chip	0.048	°C/W
Rth(c-h)	per module	0.04	°C/W



Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V_{TM}	$T=25^{\circ}\text{C}$ $I_{TM}=3000\text{A}$			2.1	V
I_{RRM}/I_{DRM}	$T_{VJ}=T_{VJM}$, $V=V_{RRM}$, $V=V_{DRM}$			80	mA
V_{TO}	$T_{VJ}=T_{VJM}$			0.84	V
r_T	$T_{VJ}=T_{VJM}$			0.3	m Ω
V_{GT}	$T_{VJ}=25^{\circ}\text{C}$, $V_D=12\text{V}$, $R_G=3\ \Omega$	0.8		2.5	V
I_{GT}	$T_{VJ}=25^{\circ}\text{C}$, $V_D=12\text{V}$, $R_G=3\ \Omega$	30		150	mA
I_L	$T_{VJ}=25^{\circ}\text{C}$, $V_D=12\text{V}$, $R_G=3\ \Omega$			1000	mA
I_H	$T_{VJ}=25^{\circ}\text{C}$, $V_D=12\text{V}$, $R_G=3\ \Omega$	20		150	mA

Performance Curves

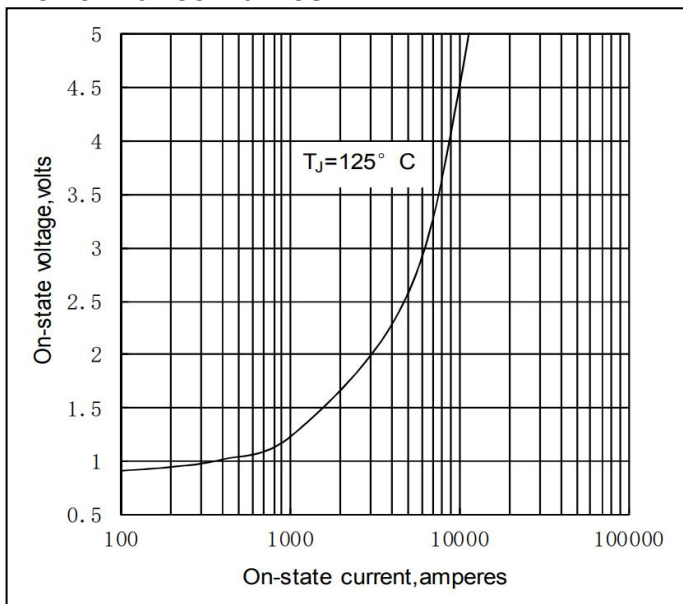


Fig1. Peak On-state Voltage Vs Peak On-state

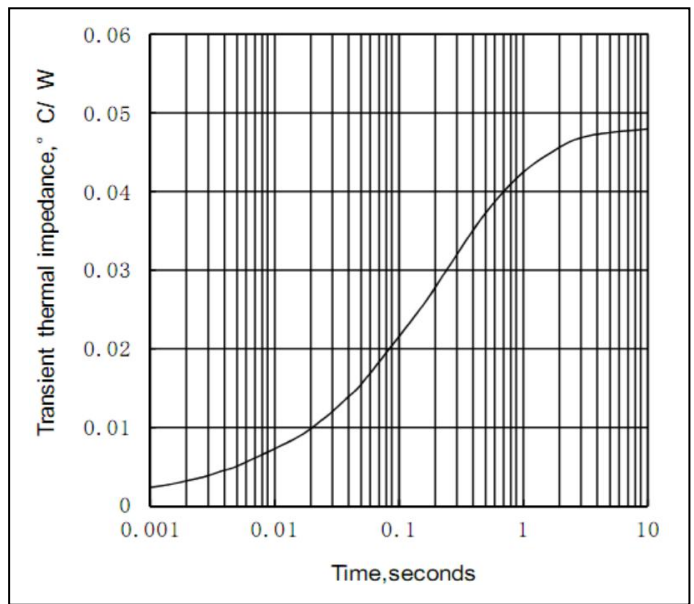


Fig2. Max. junction To case Thermal Impedance Vs Time

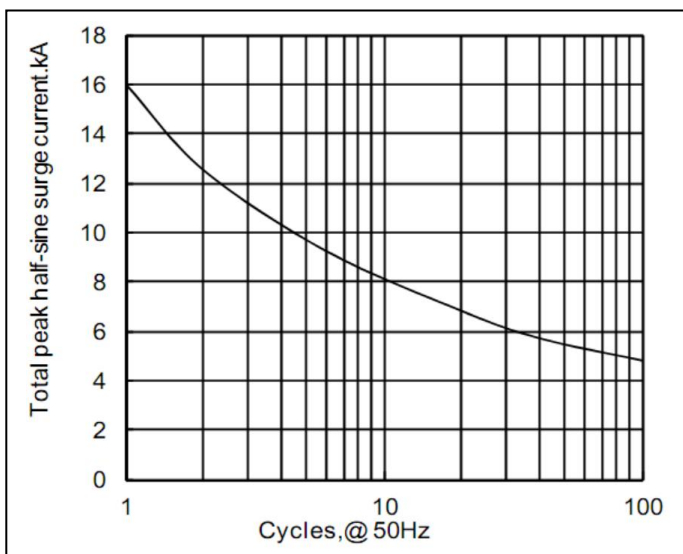


Fig3. Surge Current Vs Cycles

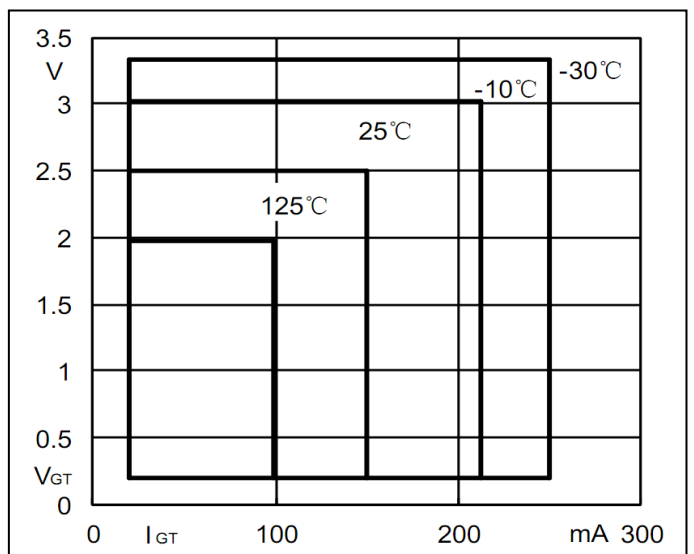


Fig4. Gate Trigger Zone at varies temperature

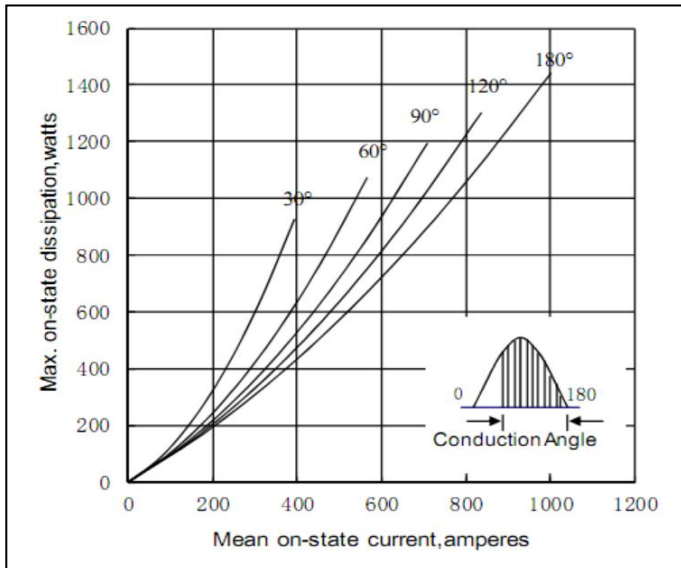


Fig5. Max. Power Dissipation Vs Mean On-state Current

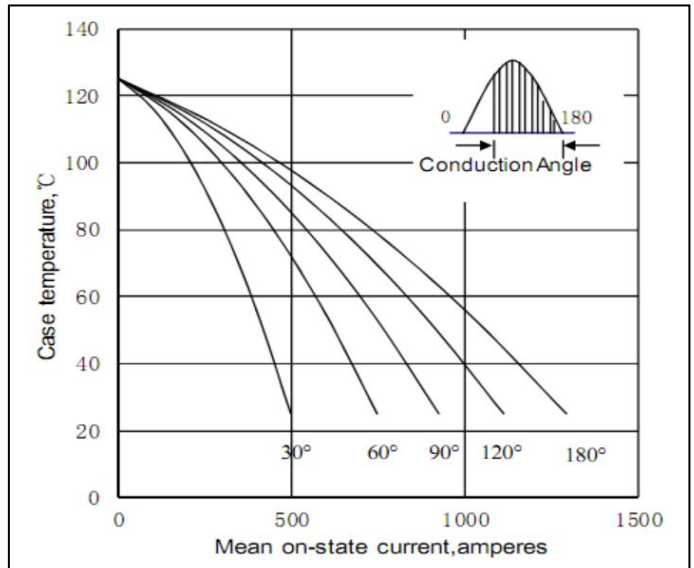


Fig6. Max case Temperature Vs Mean On-state Current

Package Outline Information

