



MT330C(A/K)-T3

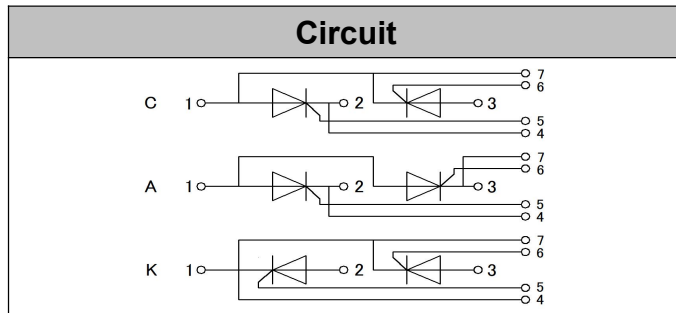


Thyristor Modules

VRRM / VDRM 1200 to 1800V
ITAV 330A

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			VRRM	VRSM
MT330C12T3	MT330A12T3	MT330K12T3	1200V	1400V
MT330C14T3	MT330A14T3	MT330K14T3	1400V	1600V
MT330C16T3	MT330A16T3	MT330K16T3	1600V	1800V
MT330C18T3	MT330A18T3	MT330K18T3	1800V	2000V

Maximum Ratings

Symbol	Conditions	Values	Units
ITAV	Sine 180°; Tc=85°C	330	A
ITSM	Tvj=125°C t=10ms, sine	9100	A
i²t	Tvj=125°C t=10ms, sine	414000	A²s
Visol	a.c.50HZ;r.m.s.;1min,Iiso :2mA(MAX)	2500	V
Tvj		-40 to 125	°C
Tstg		-40 to 125	°C
Mt	To terminals(M8)	12±15%	Nm
Ms	To heatsink(M6)	6±15%	Nm
di/dt	Tvj= TvJM ,VDM =2/3VDRM	100	A/us
dv/dt	Tj= TvJM ,2/3VDRM, linear voltage rise	1000	V/us
Weight	Module(Approximately)	690	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	per chip	0.12	°C/W
Rth(c-h)	per module	0.04	°C/W



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Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V_{TM}	$T=25^{\circ}C$ $I_{TM}=1000A$			1.6	V
I_{RRM}/I_{DRM}	$T_{VJ}=T_{VJM}$, $V_R=V_{RRM}$, $V_D=V_{DRM}$			35	mA
V_{GT}	$T_{VJ}=25^{\circ}C$, $V_D=12V$, $R_G=3\Omega$	0.8		2.5	V
I_{GT}	$T_{VJ}=25^{\circ}C$, $V_D=12V$, $R_G=3\Omega$	30		150	mA
I_L	$T_{VJ}=25^{\circ}C$, $V_D=12V$, $R_G=3\Omega$			1000	mA
I_H	$T_{VJ}=25^{\circ}C$, $V_D=12V$, $R_G=3\Omega$	20		150	mA

Performance Curves

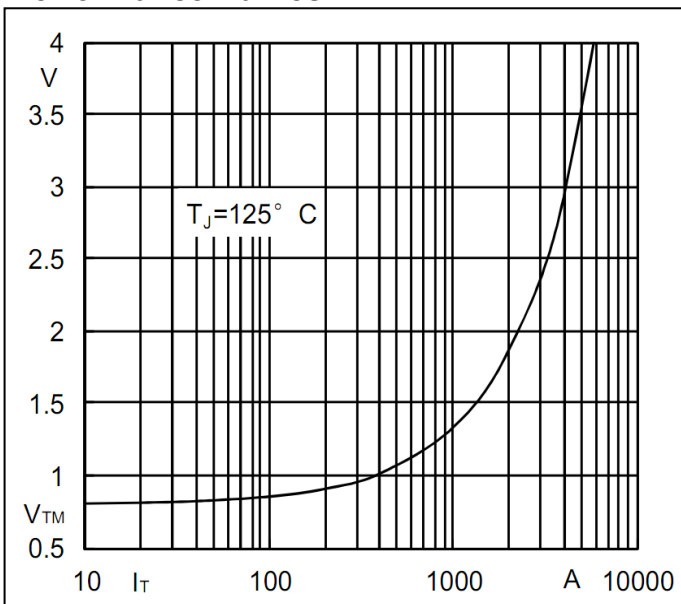


Fig1. Peak On-state Voltage Vs Peak On-state

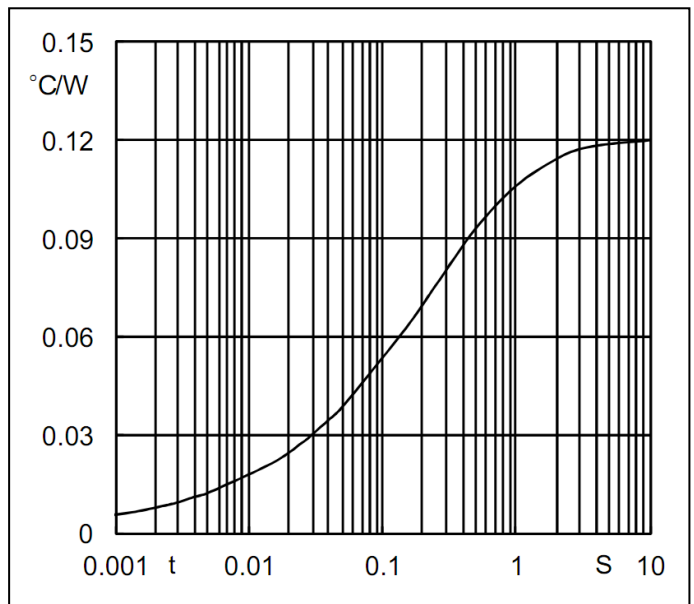


Fig2. Max. junction To case Thermal Impedance Vs Time

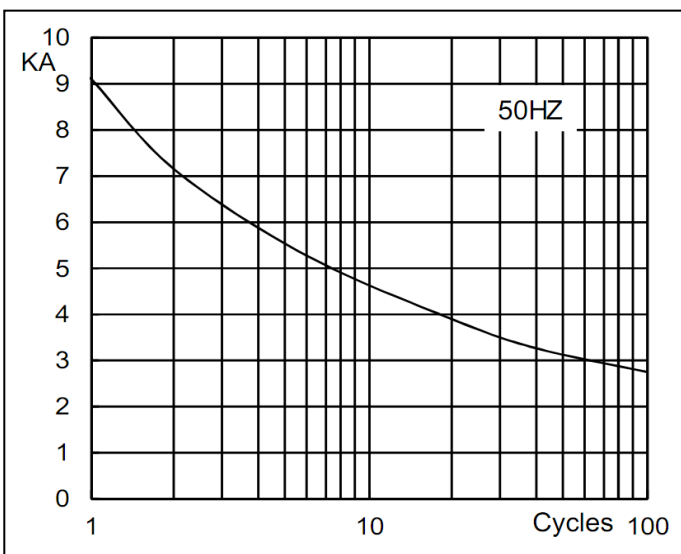


Fig3. Surge Current Vs Cycles

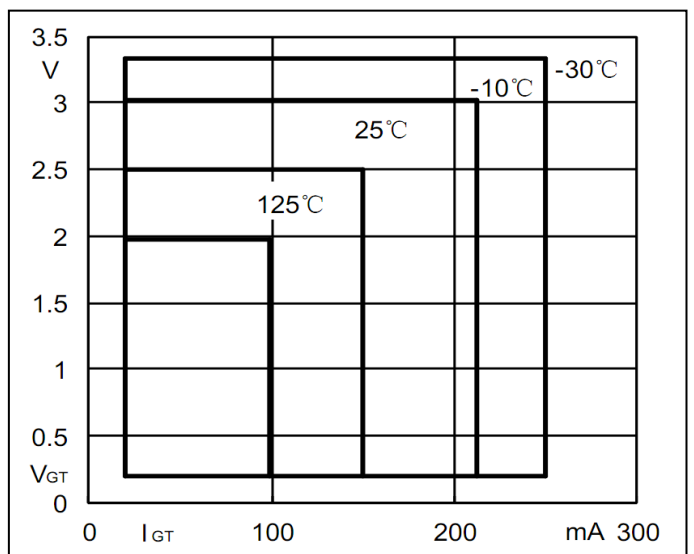


Fig4. Gate Trigger Zone at varies temperature

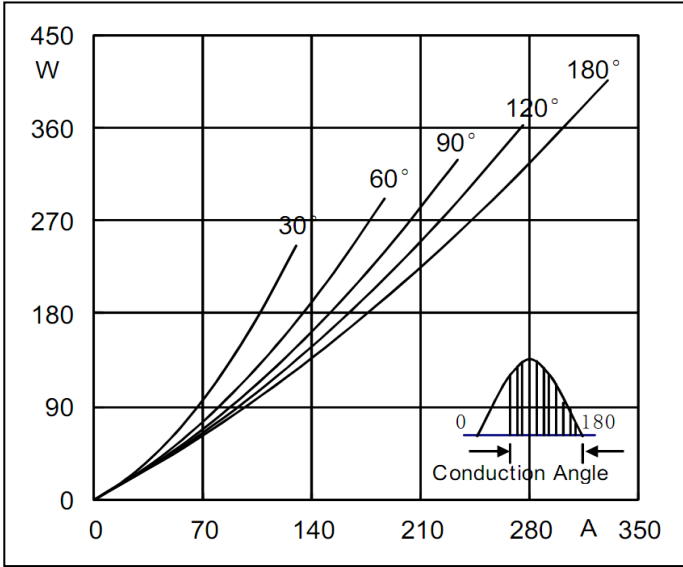


Fig5. Max. Power Dissipation Vs Mean On-state Current

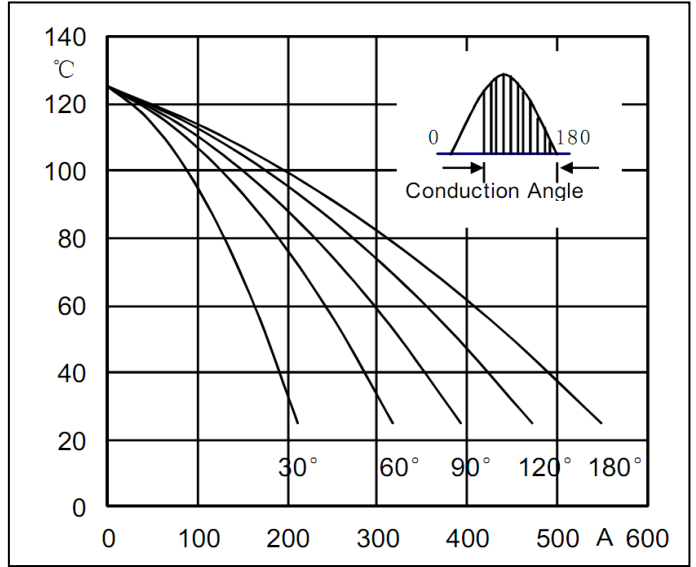


Fig6. Max case Temperature Vs Mean On-state Current

Package Outline Information

