

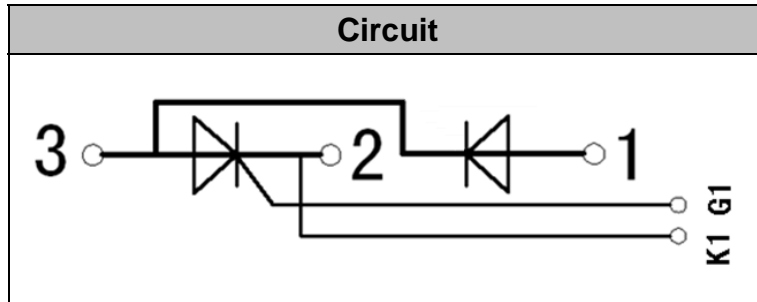


Thyristor Modules

VRRM / VDRM 800 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
MT330CB08T4	800V	900V
MT330CB12T4	1200V	1300V
MT330CB16T4	1600V	1700V
MT330CB18T4	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
I_{TAV}	Sine 180°; $T_c=85^\circ\text{C}$	330	A
I_{TSM}	$T_{VJ}=45^\circ\text{C}$ $t=10\text{ms}$, sine	9000	A
i^2t	$T_{VJ}=45^\circ\text{C}$ $t=10\text{ms}$, sine	450000	A^2s
V_{isol}	a.c.50HZ;r.m.s.;1min	2500	V
T_{vj}		-40 to 125	$^\circ\text{C}$
T_{stg}		-40 to 125	$^\circ\text{C}$
di/dt	$T_{VJ}=T_{VJM}$, $2/3V_{DRM}$, $I_G=500\text{mA}$ $Tr<0.5\mu\text{s}$, $tp>6\mu\text{s}$	150	A/ μs
dv/dt	$T_J=T_{VJM}$, $2/3V_{DRM}$, linear voltage rise	1000	V/ μs
Weight	Module(Approximately)	865	g

Thermal Characteristics

Symbol	Conditions	Values	Units
$R_{th(j-c)}$	Cont.;per module	0.12	$^\circ\text{C}/\text{W}$
$R_{th(c-s)}$	Per module	0.03	$^\circ\text{C}/\text{W}$

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V_{TM}	$T=25^{\circ}\text{C}$ $I_{TM}=900\text{A}$			1.6	V
V_F	$T=25^{\circ}\text{C}$ $I_{TM}=900\text{A}$			1.3	V
I_{RRM}/I_{DRM}	$T_{VJ}=T_{VJM}$, $V_R=V_{RRM}$, $V_D=V_{DRM}$			30	mA
P_{GM}			10		W
I_{GM}			2		A
V_{GT}	$T_{VJ}=25^{\circ}\text{C}$, $V_D=6\text{V}$			2	V
I_{GT}	$T_{VJ}=25^{\circ}\text{C}$, $V_D=6\text{V}$			150	mA
I_L	$T_{VJ}=25^{\circ}\text{C}$, $R_G=33$		400		mA
I_H	$T_{VJ}=25^{\circ}\text{C}$, $V_D=6\text{V}$		200		mA

Performance Curves

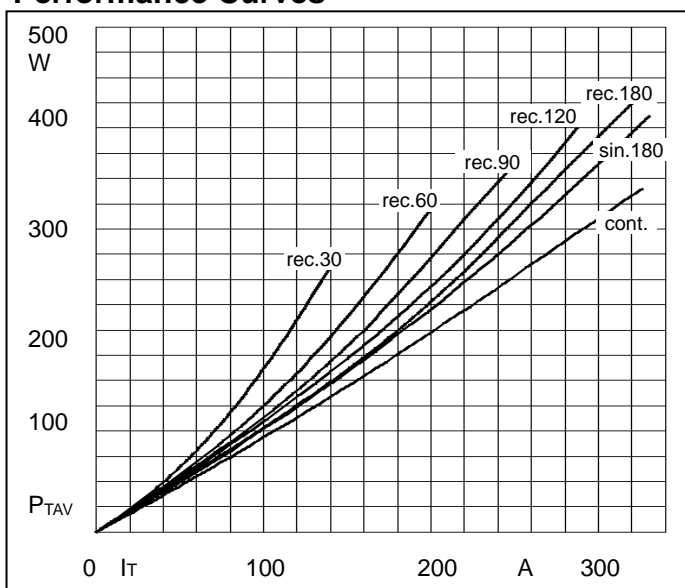


Fig1. Power dissipation

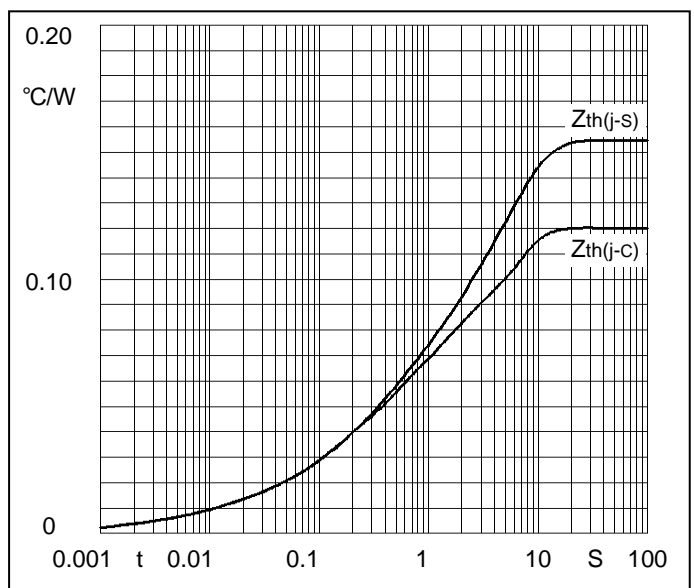


Fig2. Transient thermal impedance

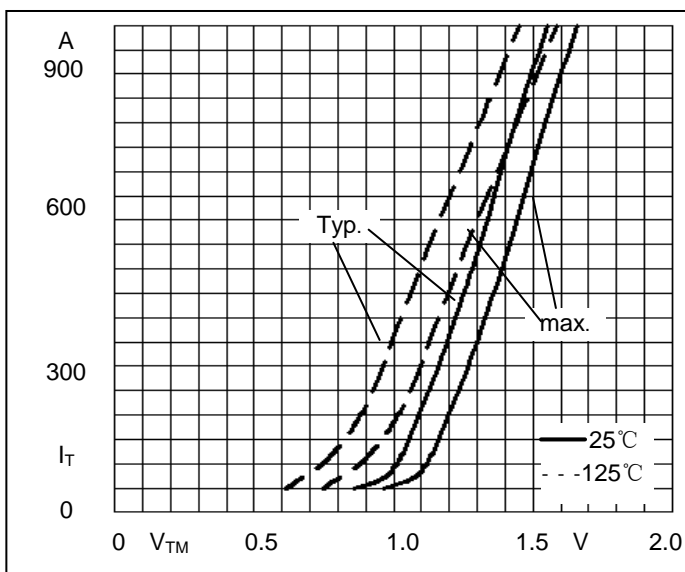


Fig3. Forward Characteristics

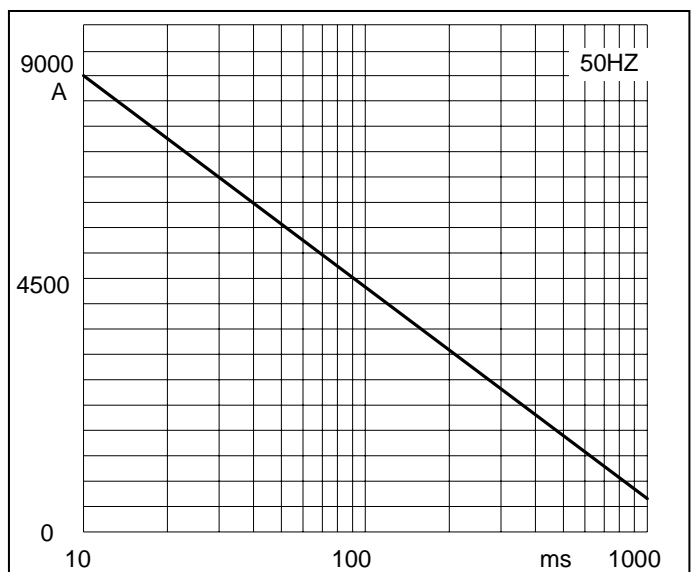


Fig4. Max Non-Repetitive Forward Surge Current

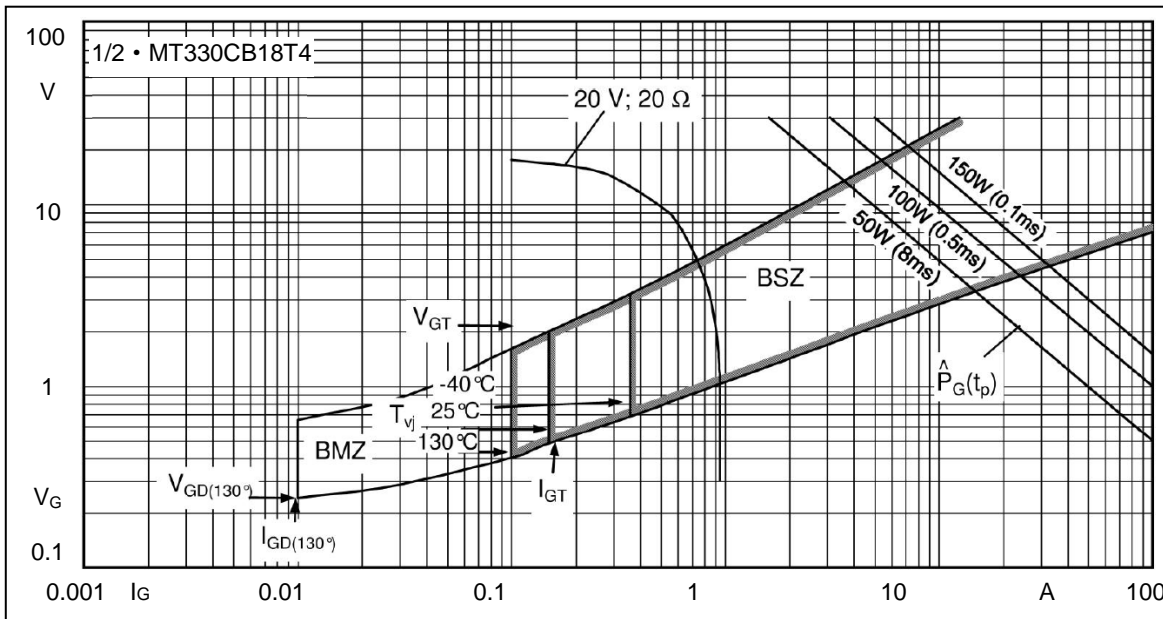


Fig5. Gate trigger Characteristics

Package Outline Information

