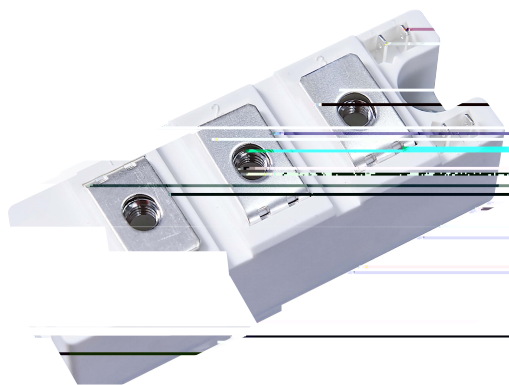




Thyristor Modules

V_{RRM} / V_{DRM} 800 to 1800V
I_{TAV} 130A

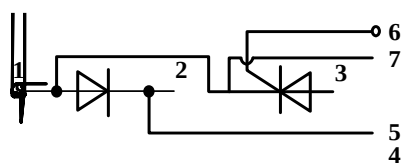
Applications

- Power Converters
- Lighting Control
- DC Motor Control and Drives
- Heat and temperature control

Features

- International standard package
- High Surge Capability
- Glass passivated chip
- Simple Mounting
- Heat transfer through aluminum oxide DBC ceramic isolated metal baseplate
- UL recognized applied for file no. E230084

Circuit



Module Type

TYPE	V _{RRM}	V _{RSM}
MT130C08T2	800V	900V
MT130C12T2	1200V	1300V
MT130C16T2	1600V	1700V
MT130C18T2	1800V	1900V

Maximum Ratings

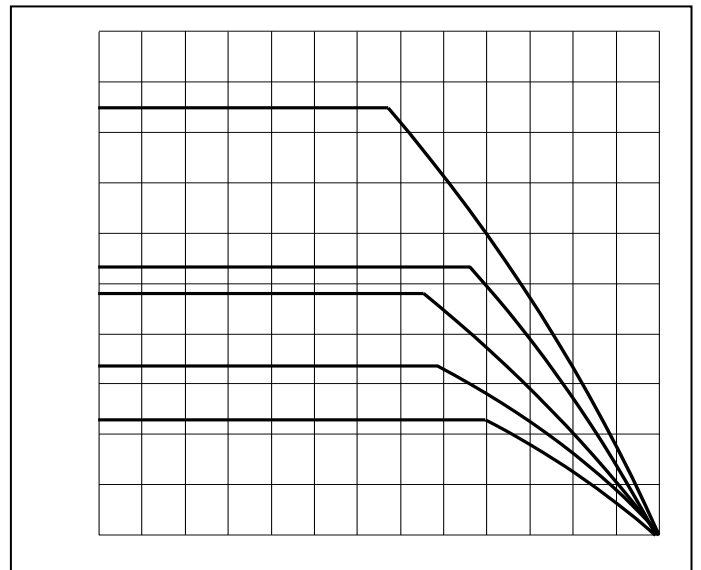
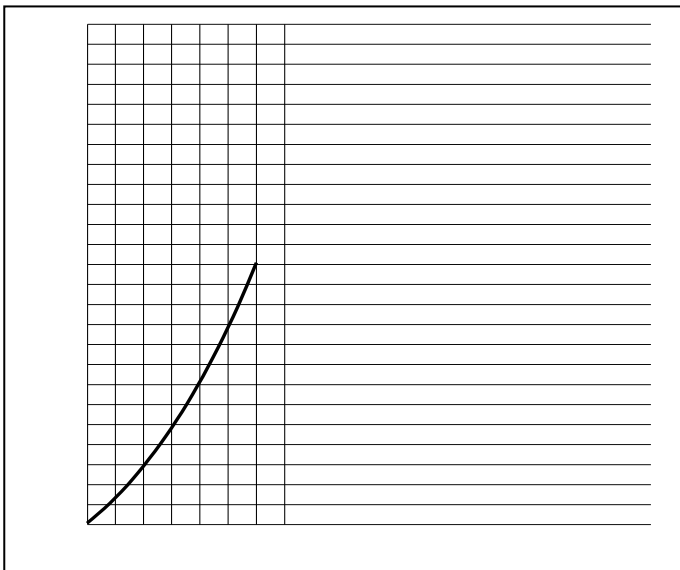
Symbol	Conditions	Values	Units
I _{TAV}	Sine 180°; T _c =85°C	130	A
I _{TSM}	T _{VJ} =45°C t=10ms, sine T _{VJ} =125°C t=10ms, sine	3600 3200	A
i ² t	T _{VJ} =45°C t=10ms, sine T _{VJ} =125°C t=10ms, sine	64800 51200	A ² s
V _{isol}	a.c.50HZ;r.m.s.;1min	3000	V
T _{vj}		-40 to 125	°C
T _{stg}		-40 to 125	°C
M _t	To terminals(M6)	3 ± 15%	Nm
M _s	To heatsink(M6)	5 ± 15%	Nm
di/dt	T _{VJ} = T _{VJM} , 2/3V _{DRM} , I _G =500mA Tr<0.5us, tp>6us	200	A/us
dv/dt	T _J = T _{VJM} , 2/3V _{DRM} , linear voltage rise	1000	V/us
a	Maximum allowable acceleration	50	m/s ²
Weight	Module(Approximately)	165	g

Thermal Characteristics

Symbol	Conditions	Values	Units
R _{th(j-c)}	Cont.;per thyristor / per module	0.18/0.09	°C/W
R _{th(c-s)}	per thyristor / per module	0.1/0.05	°C/W



Performance Curves



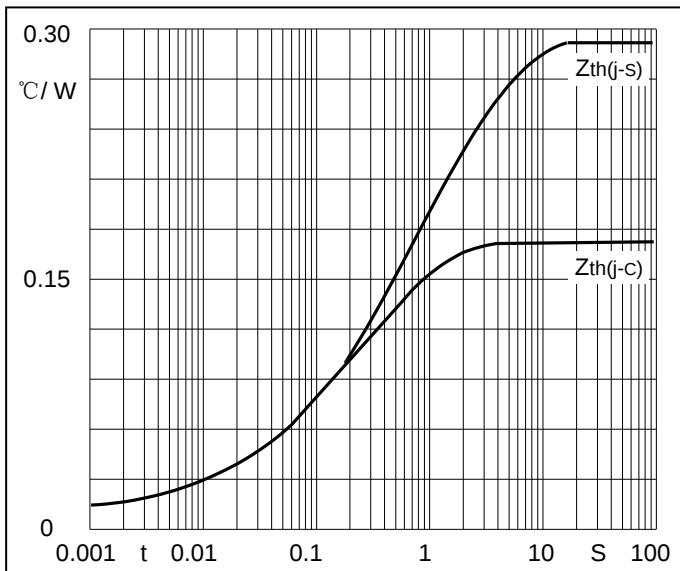


Fig3. Transient thermal impedance

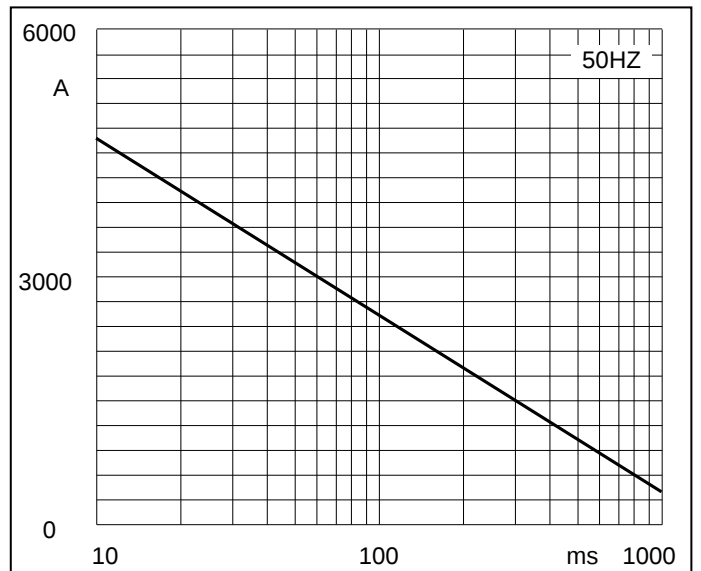
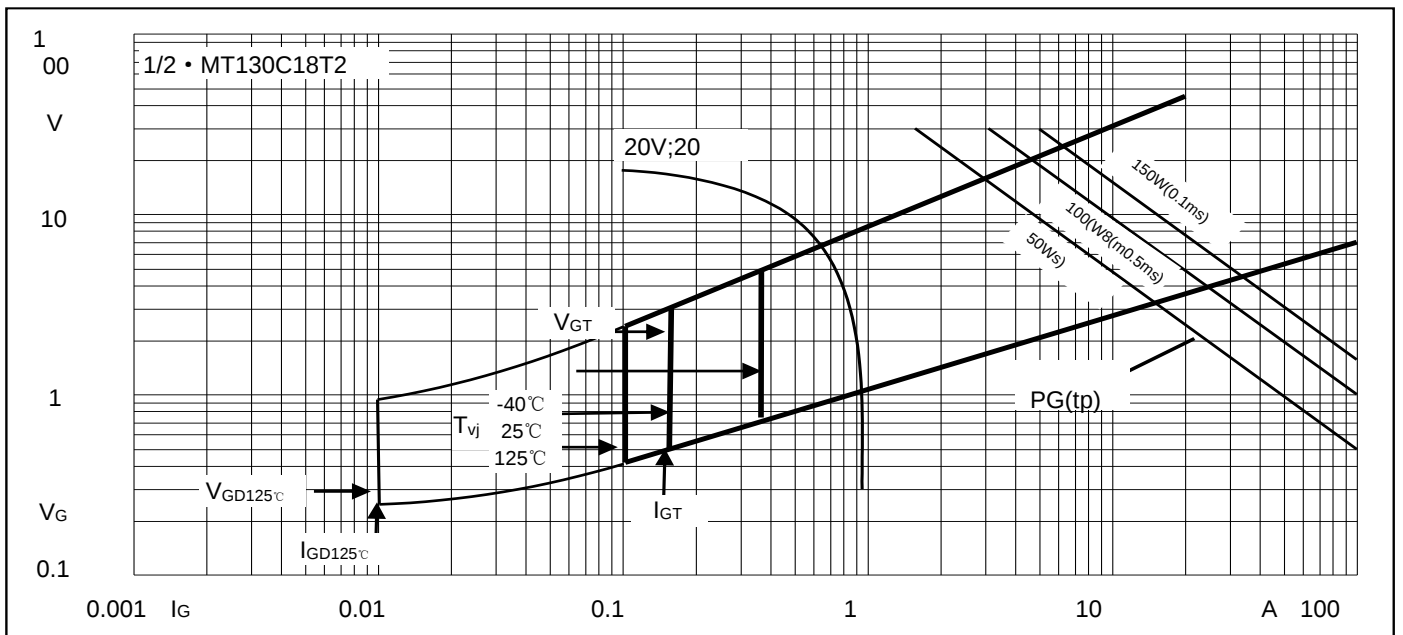
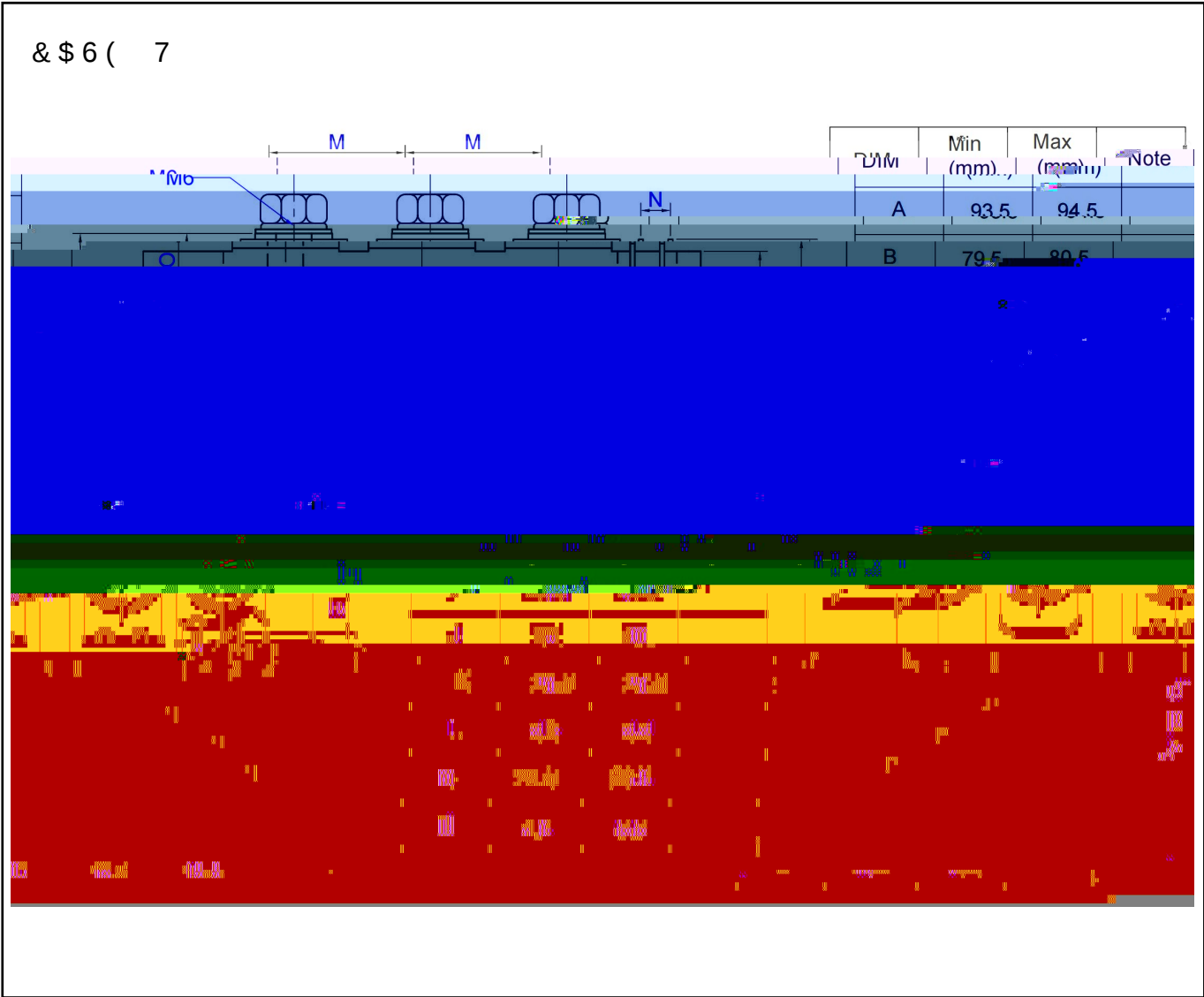


Fig4. Max Non-Repetitive Forward Surge Current



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