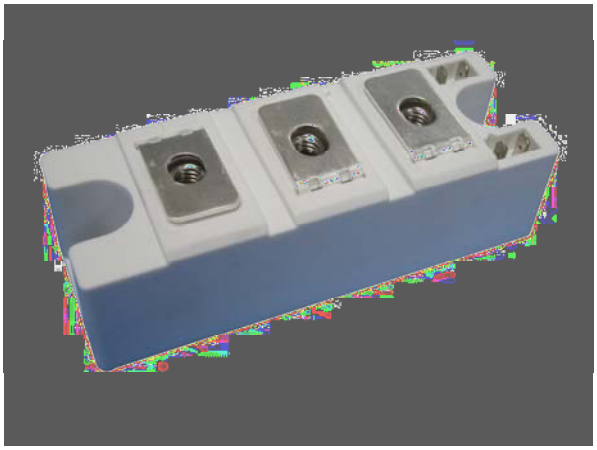


Module Type

Diode

Maximum Ratings

Symbol	Item	Conditions	Values	Units

Thyristor

Maximum Ratings

Symbol	Item	Conditions	Values	Units
I_{TAV}	Average On-State Current	Sine 180°;Tc=85	200	A
I_{TSM}	Surge On-State Current	T_{VJ} =45 t=10ms, sine T_{VJ} =125 t=10ms, sine	5500 5000	A
i^2t	Circuit Fusing Consideration	T_{VJ} =45 t=10ms, sine T_{VJ} =125 t=10ms, sine	151000 125000	A2s
Visol	Isolation Breakdown Voltage(R.M.S)	a.c.50HZ;r.m.s.;1min	3000	V
Tvj	Operating Junction Temperature		-40 to +125	
Tstg	Storage Temperature		-40 to +125	
Mt	Mounting Torque	To terminals(M6)	3 15%	Nm
Ms		To heat sink(M6)	5 15%	Nm
di/dt	Critical Rate of Rise of On-State Current	T_{VJ}= T_{VJM} , 2/3V_{DRM} ,I_G =500mA Tr<0.5us,tp>6us	200	A/us
dv/dt	Critical Rate of Rise of Off-State Voltage, min.	T_J=T_{VJM} ,2/3V_{DRM} linear voltage rise	1000	V/us
a	Maximum allowable acceleration		50	m/s^2

Thermal Characteristics

Symbol	Item	Conditions	Values	Units
Rth(j-c)	Thermal Impedance, max.	Junction to Case	0.16	/W
Rth(c-s)	Thermal Impedance, max.	Case to Heat sink	0.10	/W

Electrical Characteristics

Symbol	Item	Conditions	Values			Units
			Min.	Typ.	Max.	
V_{TM}	Peak On-State Voltage, max.	T=25 I_T =620A			1.70	V
I_{RRM}/I_{DRM}	Repetitive Peak Reverse Current, max. / Repetitive Peak Off-State Current, max.	T_{VJ}=T_{VJM} ,V_R=V_{RRM} ,V_D= V_{DRM}			40	mA
V_{TO}	On state threshold voltage	For power-loss calculations only (T_{VJ} =125)			0.85	V
r_T	Value of on-state slope resistance. max	T_{VJ} =T_{VJM}			1.5	mΩ
V_{GT}	Gate Trigger Voltage, max.	T_{VJ} =25 , V_D =6V			3	V
I_{GT}	Gate Trigger Current, max.	T_{VJ} =25 , V_D =6V			200	mA
V_{GD}	Non-triggering gate voltage, max.	T_{VJ}=125 ,V_D =2/3V_{DRM}			0.25	V
I_{GD}	Non-triggering gate current, max.	T_{VJ} =125 , V_D =2/3V_{DRM}			10	mA
I_L	Latching current, max.	T_{VJ} =25 , R(trig)4.9(ge)4.9(rin)4.125 , yHBovs)			3	

T, Tw (e) 6 Tc -.004 Tive - Rate o 284096e of Off-StateIG=TJ 09(116 Tw A,dij 10.02 0 0 10.02

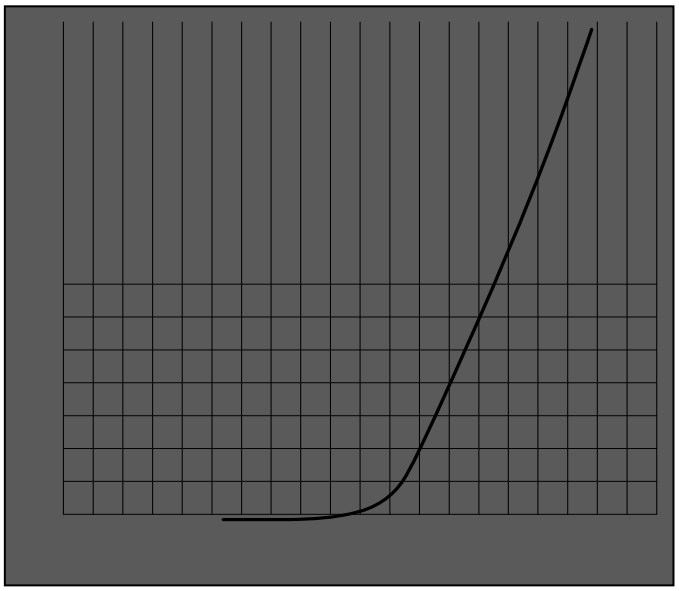
Performance Curves











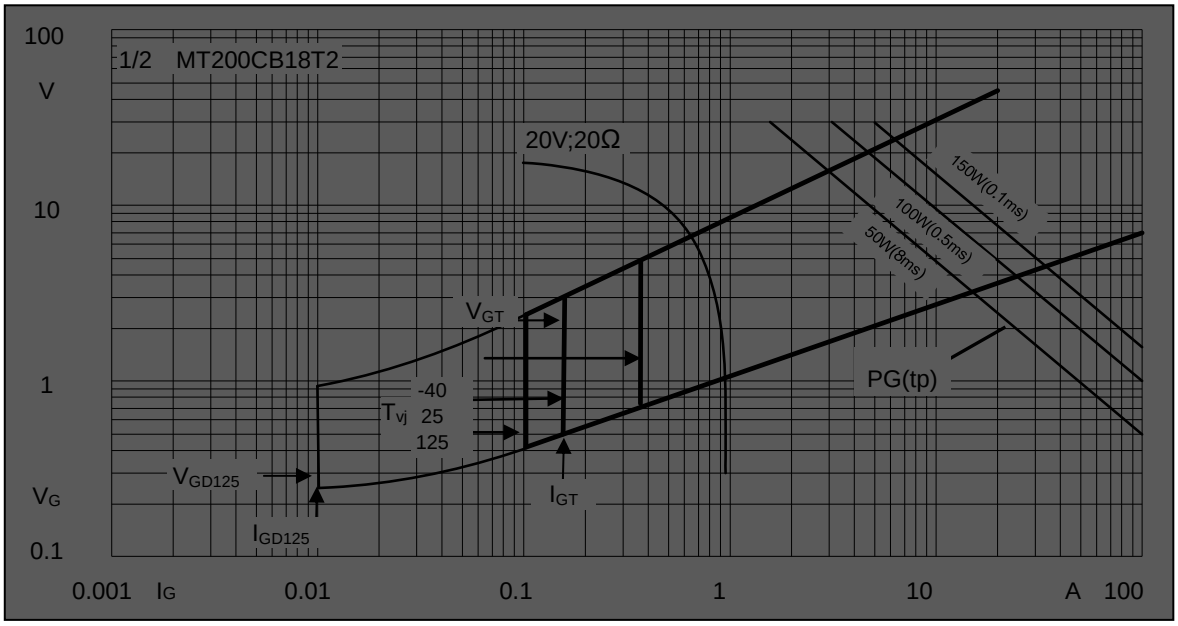
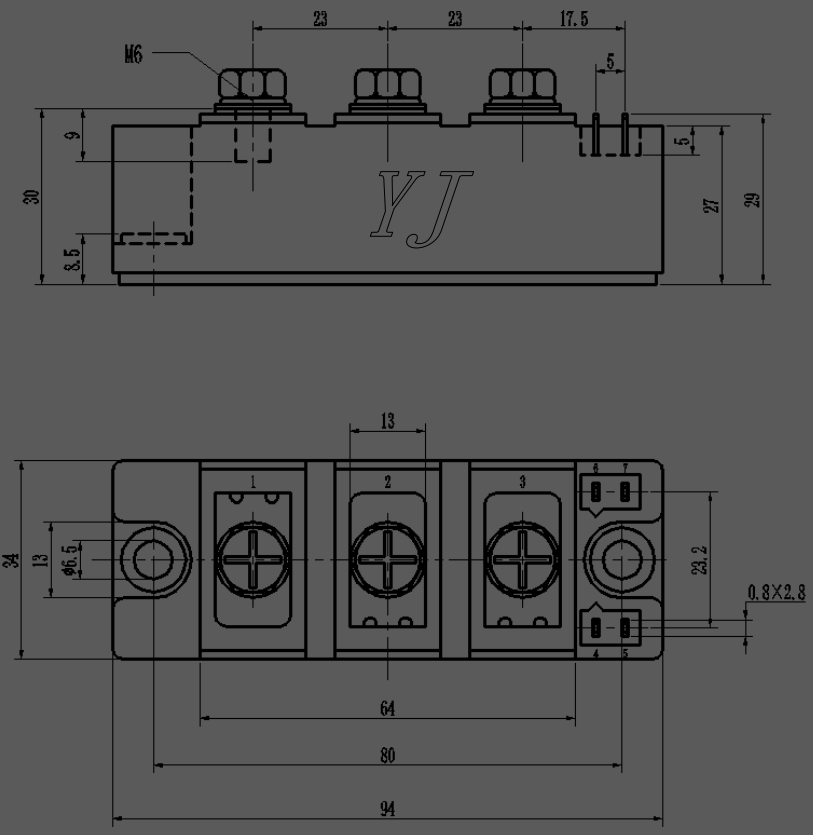


Fig6. Gate trigger Characteristics

Package Outline Information

CASE: T2



Dimensions in mm