

## Thyristor/Diode Modules

VRRM / VDRM



### Module Type

### Diode Maximum Ratings

Symbol	Item	Conditions	Values	Units
ID	Output Current(D.C.)	Tc=85	160	A
IFSM	Surge forward current	t=10mS Tvj =45	5400	A
i <sup>2</sup> t	Circuit Fusing Consideration		145000	A <sup>2</sup> s
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 heatsink(M6)	5±15%	Nm
Weight	Module Approximately		165	g

### Thermal Characteristics

Symbol	Item	Conditions	Values	Units
Rth(j-c)	Thermal Impedance, max.	Junction to Case	0.085	/W
Rth(c-s)	Thermal Impedance, max.	Case to Heatsink	0.05	/W

### Electrical Characteristics



## Thyristor Maximum Ratings

Symbol	Item	Conditions	Values	Units
$I_{TAV}$	Average On-State Current	Sine 180°;Tc=85	160	A
$I_{TSM}$	Surge On-State Current	$T_{VJ}=45$ t=10ms, sine $T_{VJ}=125$ t=10ms, sine	5400 5000	A
$i^2t$	Circuit Fusing Consideration	$T_{VJ}=45$ t=10ms, sine $T_{VJ}=125$ t=10ms, sine	145000 125000	A <sup>2</sup> s
Visol	Isolation Breakdown Voltage(R.M.S)	ac: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	

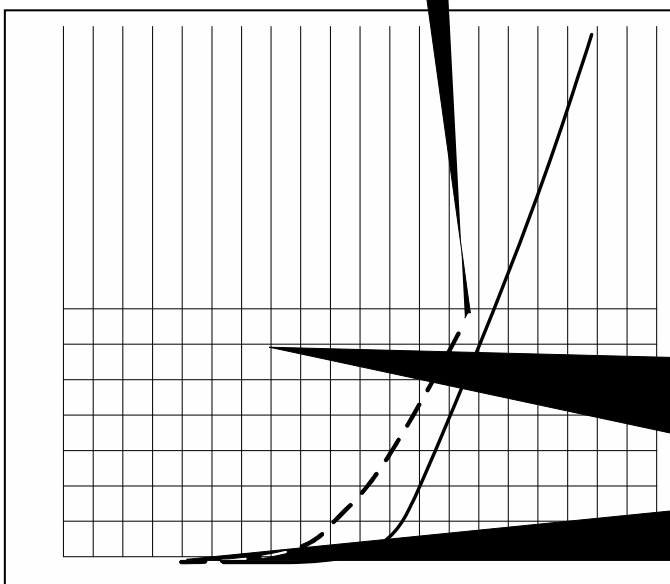
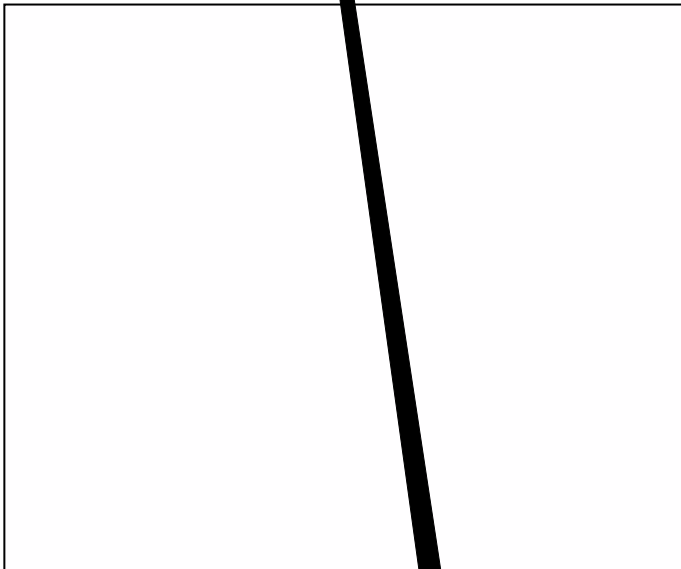
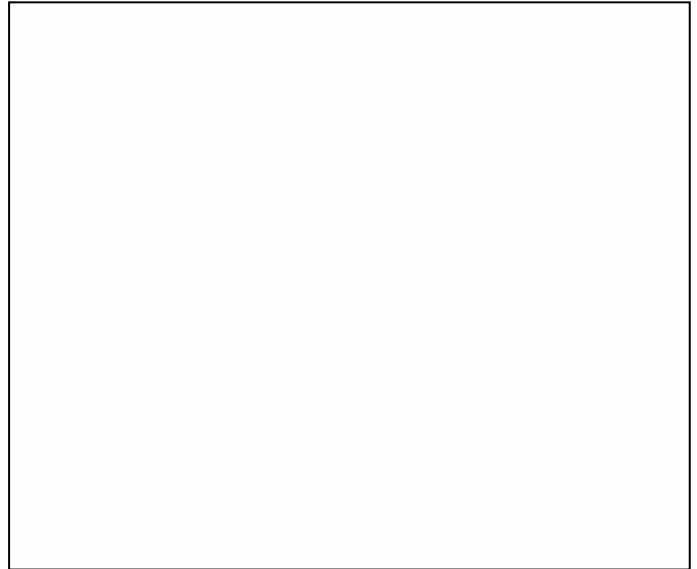
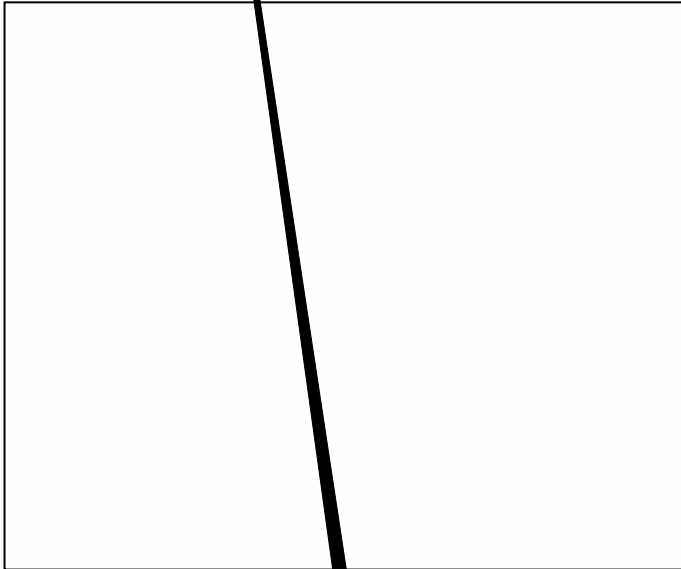
## Thermal Characteristics

Symbol	Item	Conditions	Values	Units
$R_{th(j-c)}$	Thermal Impedance, max.	Junction to Case	0.17	/W
$R_{th(c-s)}$	Thermal Impedance, max.	Case to Heatsink	0.10	/W

## Electrical Characteristics



## Performance Curves



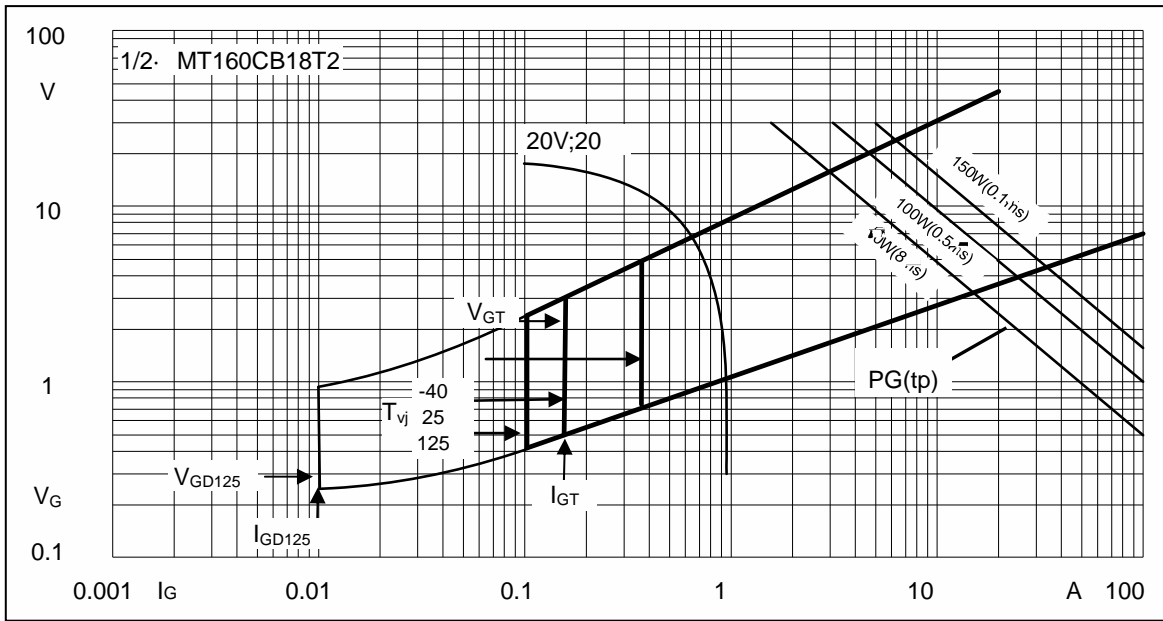
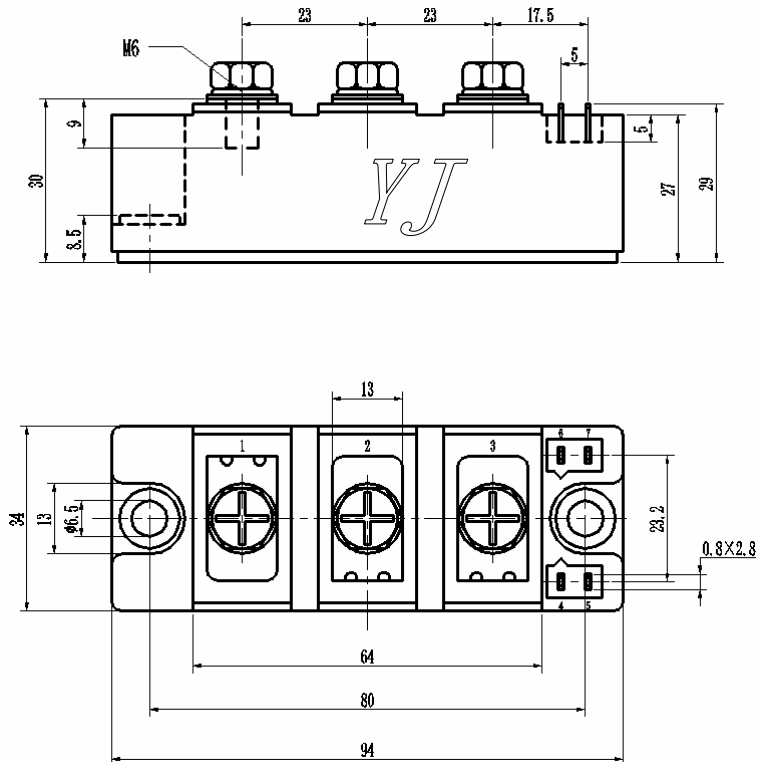


Fig6. Gate trigger Characteristics

## Package Outline Information

### CASE: T2



Dimensions in mm