



Thyristor Module

VRRM / VDRM 800 to 1800V
ITAV 110A

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. E360040

Module Type

TYPE	VRRM	VRSM
MT110C08T1	800V	900V
MT110C12T1	1200V	1300V
MT110C16T1	1600V	1700V
MT110C18T1	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
I_{TAV}	Sine 180°; $T_c=85$	110	A
I_{TSM}	$T_{VJ}=45$ t=10ms, sine	2250	A
	$T_{VJ}=125$ t=10ms, sine	1900	
i^2t	$T_{VJ}=45$ t=10ms, sine	25000	A^2
	$T_{VJ}=125$ t=10ms, sine	18000	

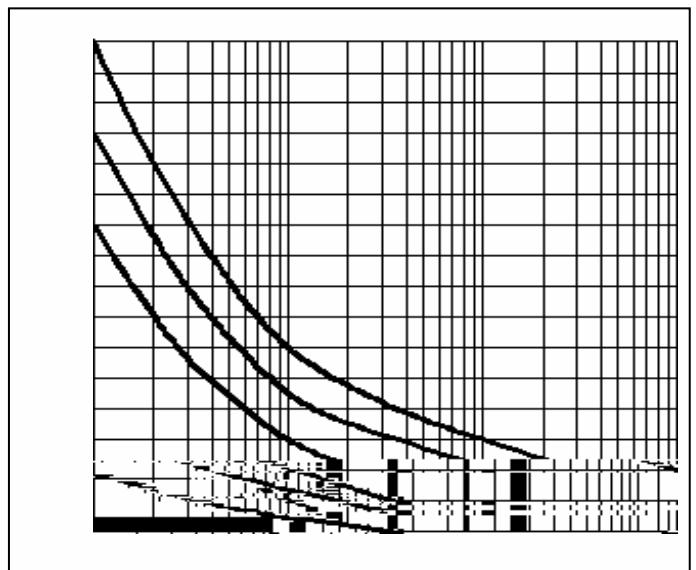
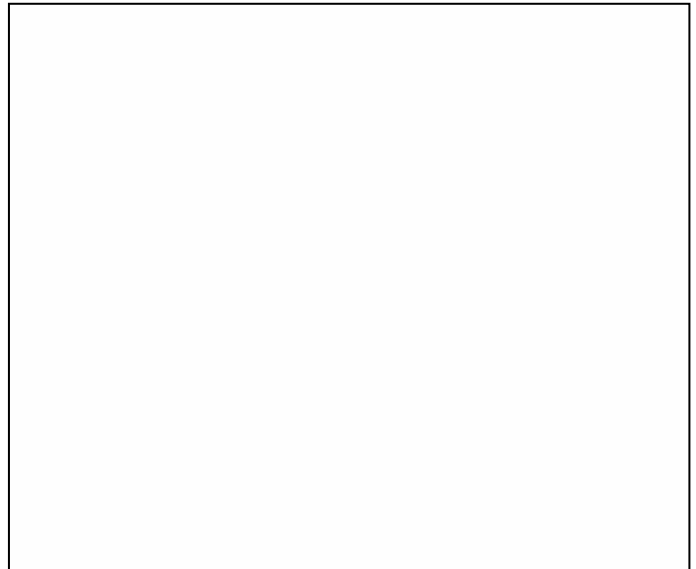
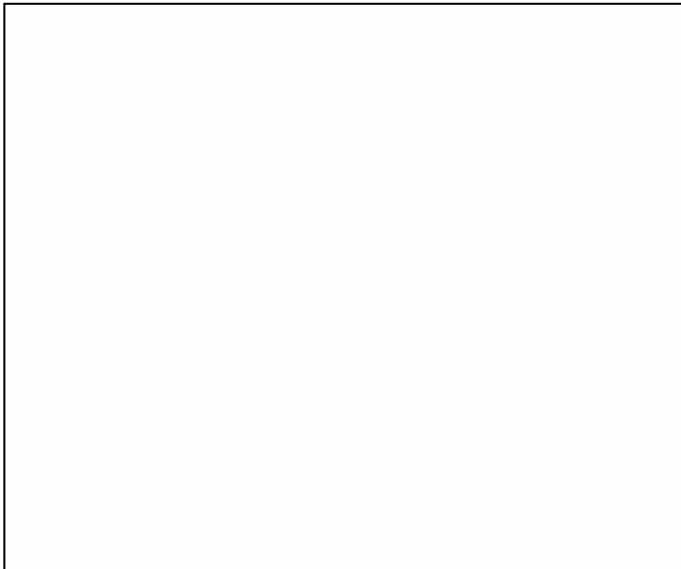
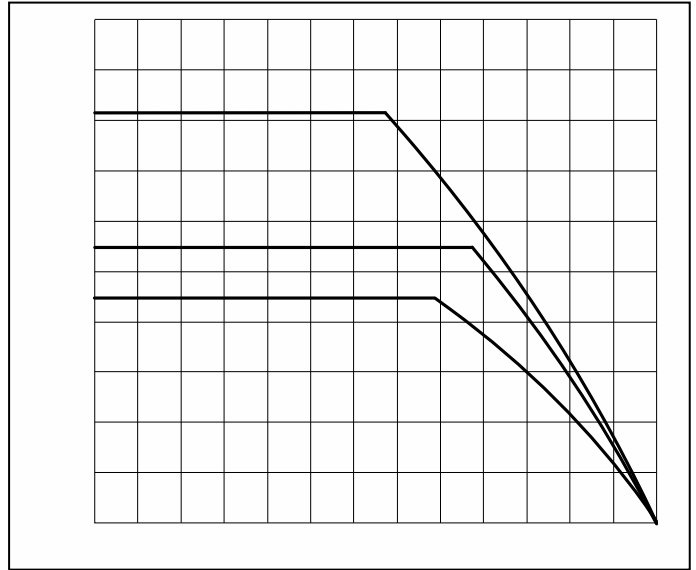
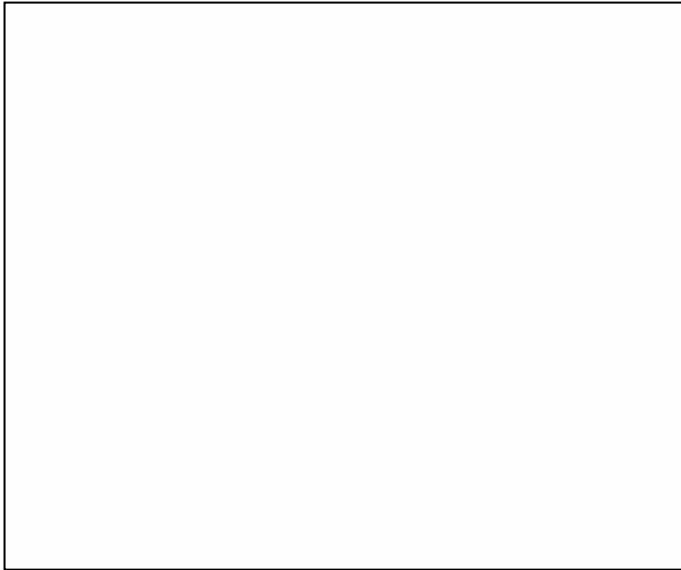
Thermal Characteristics



Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V_{TM}	$T=25$ $I_{TM}=300A$			1.65	V
I_{RRM}/I_{DRM}	$T_{VJ}=T_{VJM}, V_R=V_{RRM}, V_D=V_{DRM}$			20	mA
V_{TO}	For power-loss calculations only ($T_{VJ}=125$)			0.9	V
r_T	$T_{VJ}=T_{VJM}$			2	m
V_{GT}	$T_{VJ}=25$, $V_D=6V$			3	V
I_{GT}	$T_{VJ}=25$, $V_D=6V$			150	mA
V_{GD}	$T_{VJ}=125$, $V_D=2/3V_{DRM}$			0.25	V
I_{GD}	$T_{VJ}=125$, $V_D=2/3V_{DRM}$			6	mA
I_L	$T_{VJ}=25$, $R_G=33$		300	600	mA
I_H	$T_{VJ}=25$, $V_D=6V$		150	250	mA
tgδ	$T_{VJ}=25$, $I_G=1A$, $di_G/dt=1A/us$		1		us
tq	$T_{VJ}=T_{VJM}$				

Performance Curves



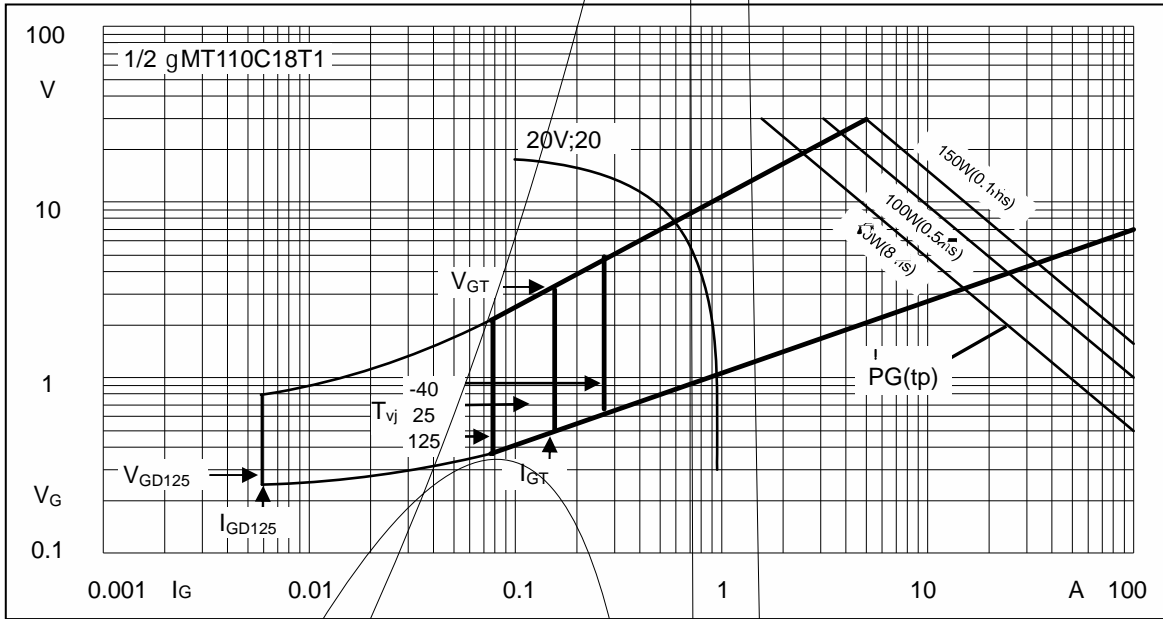
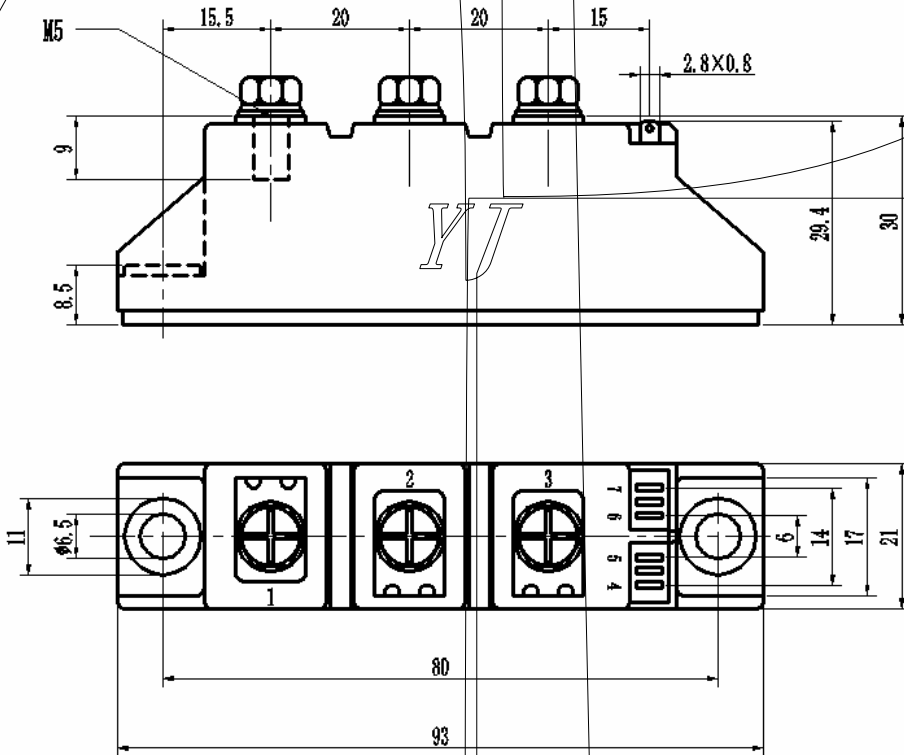


Fig7. Gate trigger Characteristics

Package Outline Information

CASE: T1



Dimensions in mm