

**YZPST-MTC1000A/1800V(WATER COOLED MODULE)**
**Maximum Ratings**

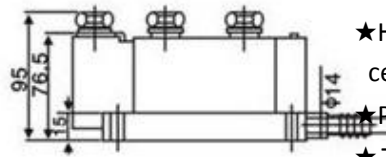
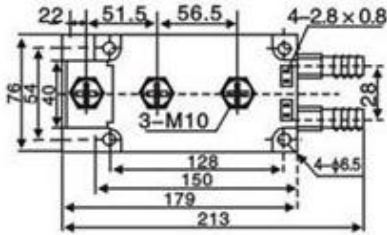
Symbol	Condition	Ratings	Unit
$I_{T(AV)}$	Single phase, half wave, 180° conduction, $T_c=78^\circ\text{C}/85^\circ\text{C}$	1000/850	A
$I_{TRMS}$	Single phase, half wave, 180° conduction, $T_c=78^\circ\text{C}$	1256	A
$I_{TSM}$	$T_j=125^\circ\text{C}$	28	KA
$I^2t$	$T_j=125^\circ\text{C}$	5120	KA <sup>2</sup> S
$V_{DRM}/V_{RRM}$		1800/1800	V
$(di/dt)_{cr}$	$T_j=125^\circ\text{C}$	400	A/us
$V_{iso}$	A.C.1minute	3000	V
$T_j$		-40 ~ +125	°C
$T_{stg}$		-40 ~ +130	°C
W		-	g

**Electrical Characteristics**

Symbol	Condition	Ratings	Unit
$I_{DRM}$	AtVDRM, Single phase, half wave, $T_j=125^\circ\text{C}$	100	mA
$I_{RRM}$	AtVRRM, Single phase, half wave, $T_j=125^\circ\text{C}$	100	mA
$V_{TM}$	On-State Current 2500A, $T_j=25^\circ\text{C}$	1.55	V
$V_{T(TO)}$	$T_j=125^\circ\text{C}$	0.85	V
$R_{K1G1}$		-	Ω
$R_{K2G2}$		-	Ω
$t_{gd}$	$T_j=25^\circ\text{C}; V_D=0.4V_{DRM}; I_{TM}=I_{TAV}$	2.0	us
$t_q$	$dv_D/dt=50V/us; T_j=125^\circ\text{C}; I_{TM}=I_{TAV}$	250	us
$I_{GT}/V_{GT}$	$T_j=25^\circ\text{C}, I_T=1A, V_D=6V$	250 / 2.5	mA/V
$V_{GD}$	$T_j=130^\circ\text{C} V_D=1/2V_{DRM}$	0.25	V
DV/DT	$T_j=130^\circ\text{C}, V_D=2/3V_{DRM}$	1000	V/us
$I_H$	$T_j=25^\circ\text{C}$	300	mA
$I_L$	$T_j=25^\circ\text{C}$	1500	mA
$R_{th(j-c)}$	Per Module	0.025	°C/W

**YZPST-MTC1000A/1600V(WATER COOLED MODULE)**

**Case Outline And Dimensions**



**Features**

- ★ Heat transfer through aluminium nitrogen ceramic isolated metal baseplate
- ★ Precious metal pressure contacts
- ★ Thyristor with amplifying gate

**Typical Applications**

- ★ DC motor control(e.g. for machine tools)
- ★ AC motor soft starters
- ★ Temperature control(e.g. for ovens,chemical processes)
- ★ Professional light dimming(studios,theaters)