

Thyristors

T500



Technical Data

Typical applications : D.C. Motor control, Controlled rectifiers, A.C. Controllers

Type No.	V_{RRM} (Volts)	V_{RSM} (Volts)
T500/04	400	500
T500/06	600	700
T500/08	800	900
T500/12	1200	1300
T500/14	1400	1500
T500/16	1600	1700
T500/18	1800	1900

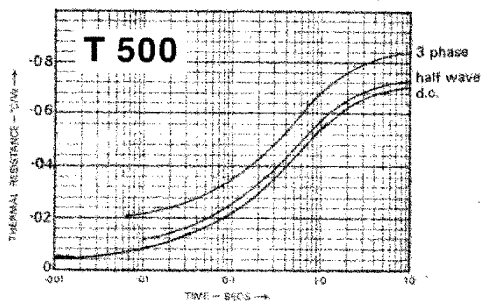
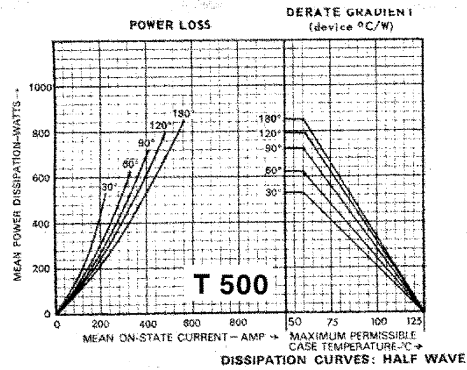
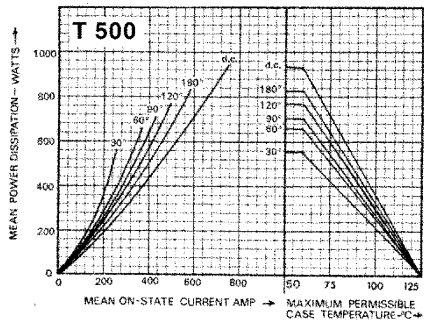
Features

- Ceramic Header
- Voltage grade upto 1800V
- Weight 550 gm (Approx)

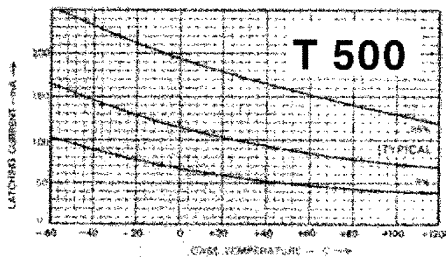
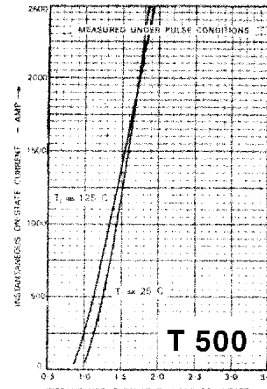
Symbol	Conditions	Values
$I_{T(AV)}$	Half wave resistive load; $T_{case} = 70\text{ }^{\circ}\text{C}$	500 A
I_{TSM}	$T_{vj} = 125\text{ }^{\circ}\text{C}$; 10 ms half sine, $V_R = 50\% V_{RRM}$	11200 A
I^2t	$T_{vj} = 125\text{ }^{\circ}\text{C}$; 10 ms half sine	625000 A^2s
	$T_{vj} = 125\text{ }^{\circ}\text{C}$; 3 ms half sine	460000 A^2s
I_{GT} V_{GT} dv/dt $[di/dt]_{CR}$	$T_{vj} = 25\text{ }^{\circ}\text{C}$; $V_{DRM} = 5\text{V}$	150 mA
	$T_{vj} = 25\text{ }^{\circ}\text{C}$; $V_{DRM} = 5\text{V}$	3.5 V
	$T_{vj} = 125\text{ }^{\circ}\text{C}$; Voltage = 67 % V_{DRM}	*200 V/ μs
	Repetitive 50 Hz	100 A/ μs
V_T I_{RRM}/I_{DRM}	$T_{vj} = 25\text{ }^{\circ}\text{C}$; $I_T = 1600\text{A}$	1.62 V max
	$T_{vj} = 125\text{ }^{\circ}\text{C}$	50 mA
I_H	Typ. value.	80 mA
I_L	Typ. value.	100 mA
$R_{th(j-h)}$ T_{vj} T_{stg}	dc	0.070 $^{\circ}\text{C/W}$
	Half wave	0.073 $^{\circ}\text{C/W}$
	3-Phase	0.084 $^{\circ}\text{C/W}$
		+ 125 $^{\circ}\text{C}$ -40.....+ 125 $^{\circ}\text{C}$
Mounting torque		15 Nm per Bolt
Case outline		S

* Higher dv/dt selection available on request

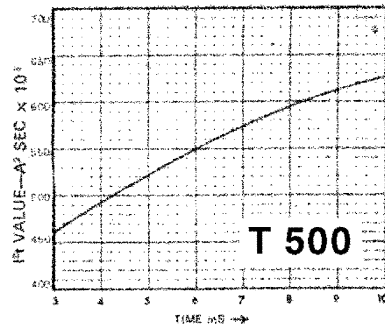




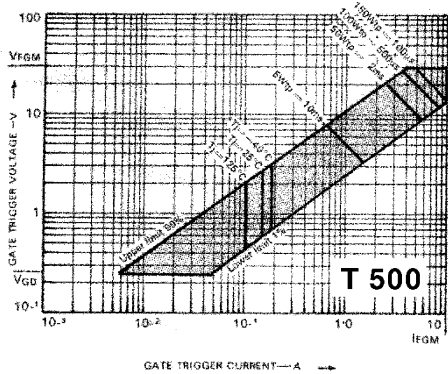
MAXIMUM (LIMIT) TRANSIENT THERMAL RESISTANCE



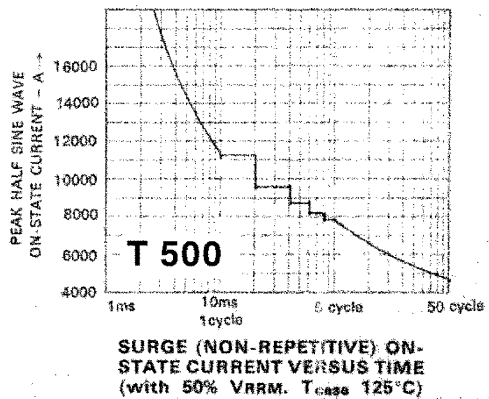
LATCHING CURRENT VERSUS CASE TEMPERATURE



I^2t VERSUS TIME AT 125°C



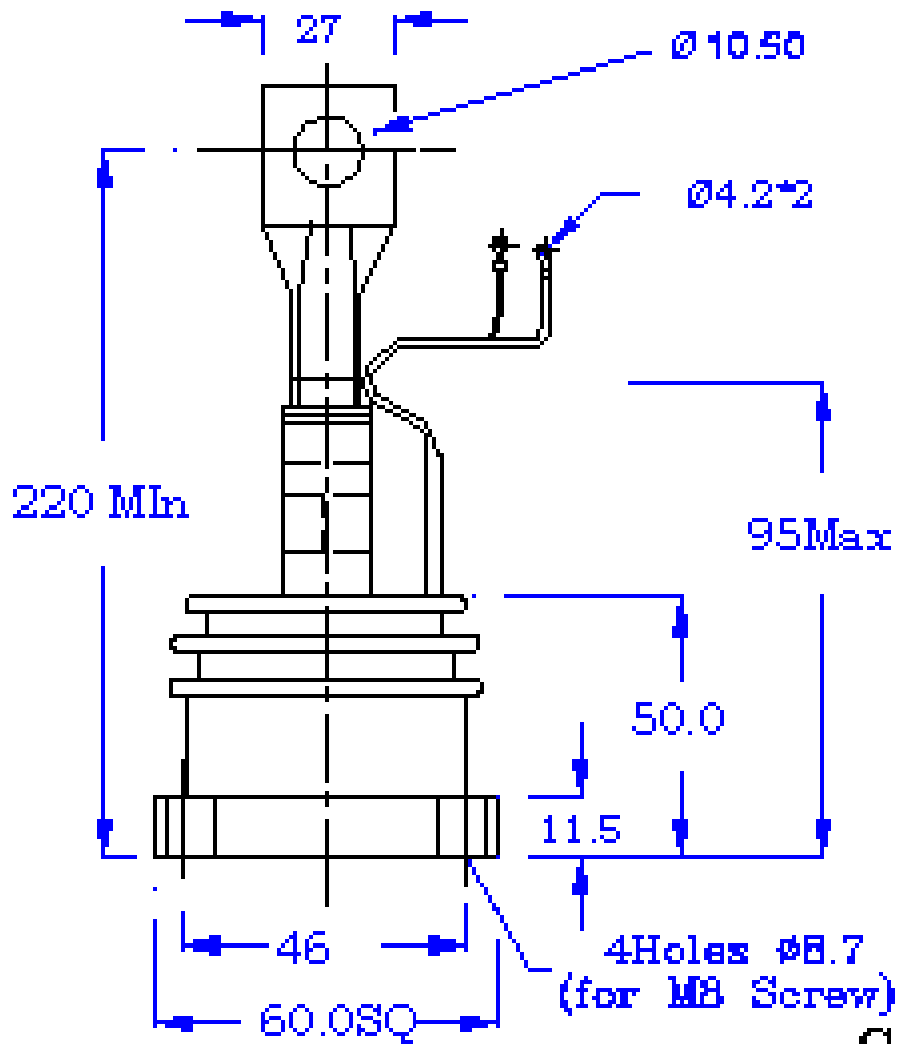
GATE CHARACTERISTICS



PACAKAGE DEATILS

DO NOT SCALE

All Dimensions in mm



Mounting Torque 15Nm/Bolt