

# Thyristors

## T280



### Technical Data

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

Type No.	$V_{RRM}$ (Volts)	$V_{RSM}$ (Volts)
T280/04	400	500
T280/06	600	700
T280/08	800	900
T280/12	1200	1300
T280/14	1400	1500
T280/16	1600	1700
T280/18	1800	1900

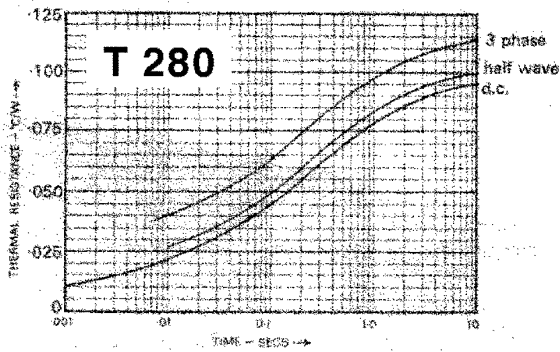
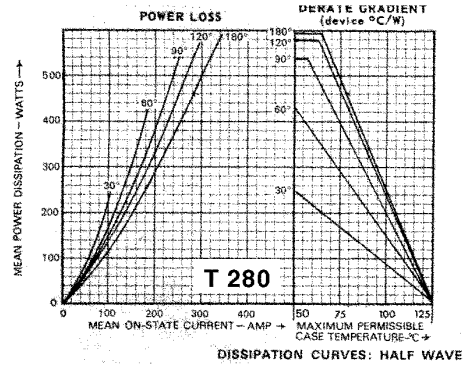
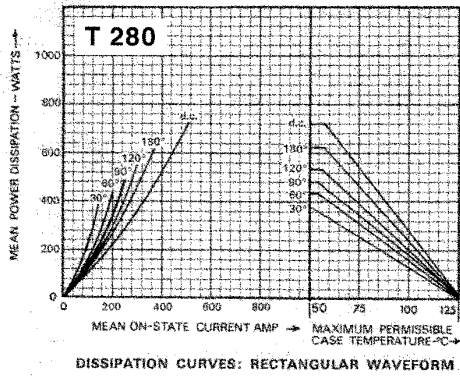
### Features

- Hermetic glass to metal seal
- Voltage grade upto 1800V
- Weight 450 gm ( Approx )

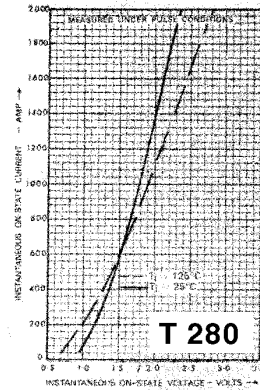
Symbol	Conditions	Values
$I_{T(AV)}$	Half wave resistive load; $T_{case} = 78\text{ }^{\circ}\text{C}$	280 A
$I_{TSM}$	$T_{vj} = 125\text{ }^{\circ}\text{C}$ ; 10 ms half sine, $V_R = 50\% V_{RRM}$	6400 A
$I^2t$	$T_{vj} = 125\text{ }^{\circ}\text{C}$ ; 10 ms half sine	205000 A <sup>2</sup> s
	$T_{vj} = 125\text{ }^{\circ}\text{C}$ ; 3 ms half sine	163000 A <sup>2</sup> s
$I_{GT}$	$T_{vj} = 25\text{ }^{\circ}\text{C}$ ; $V_{DRM} = 5\text{V}$	150 mA
$V_{GT}$	$T_{vj} = 25\text{ }^{\circ}\text{C}$ ; $V_{DRM} = 5\text{V}$	3.5 V
$dv/dt$	$T_{vj} = 125\text{ }^{\circ}\text{C}$ ; Voltage = 67 % $V_{DRM}$	*200 V/ $\mu$ s
$[di/dt]_{CR}$	Repetitive 50 Hz	100 A/ $\mu$ s
$V_T$	$T_{vj} = 25\text{ }^{\circ}\text{C}$ ; $I_T = 1000\text{A}$	1.75 V max
$I_{RRM}/I_{DRM}$	$T_{vj} = 125\text{ }^{\circ}\text{C}$	50 mA
$I_H$	Typ. value.	78 mA
$I_L$	Typ. value.	88 mA
$R_{th(j-h)}$	dc	0.095 $^{\circ}\text{C/W}$
	Half wave	0.100 $^{\circ}\text{C/W}$
	3-Phase	0.114 $^{\circ}\text{C/W}$
$T_{vj}$		+ 125 $^{\circ}\text{C}$
$T_{stg}$		-40.....+ 125 $^{\circ}\text{C}$
Mounting torque		50Nm /12.5Nm per Bolt
Case outline		Std. Z / Alt. W

\* Higher dv/dt selection available on request

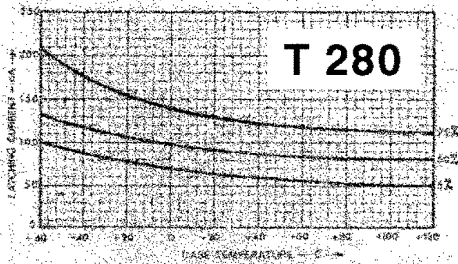




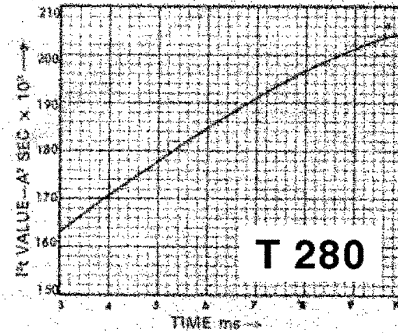
MAXIMUM (LIMIT) TRANSIENT THERMAL RESISTANCE



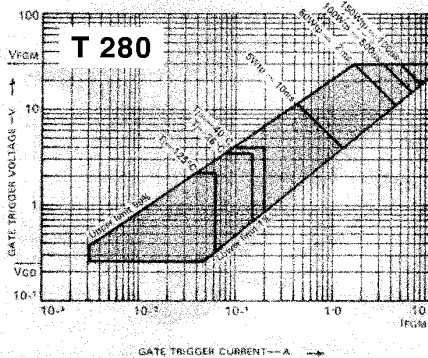
MAXIMUM (LIMIT) ON-STATE CHARACTERISTICS



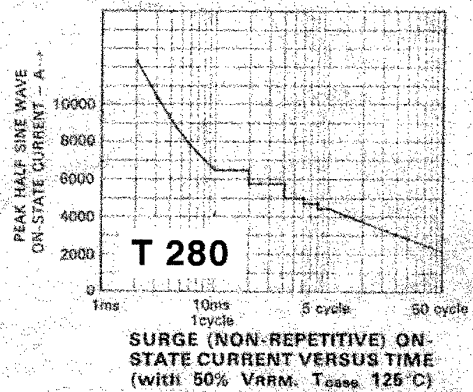
LATCHING CURRENT VERSUS CASE TEMPERATURE



I²t VERSUS TIME AT 125°C



GATE CHARACTERISTICS

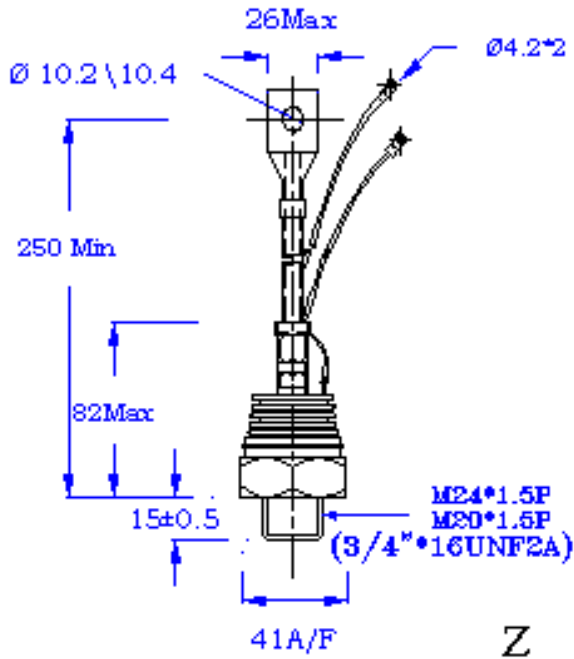


SURGE (NON-REPETITIVE) ON-STATE CURRENT VERSUS TIME (with 50% VRRM, T<sub>case</sub> 125°C)

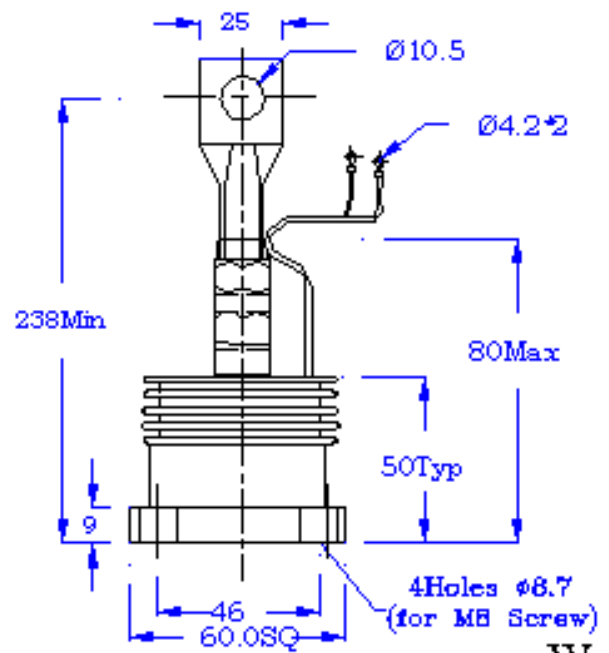
# PACAKAGE DEATILS

DO NOT SCALE

All Dimensions in mm



Mounting Torque 60NM Z



Mounting Torque 15NM/Bolt<sup>W</sup>