Thyristors
T280

USHA (INDIA) LTD

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

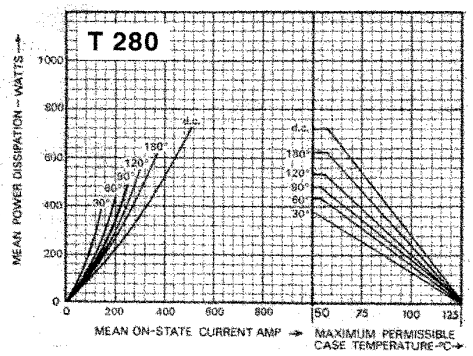
Features

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

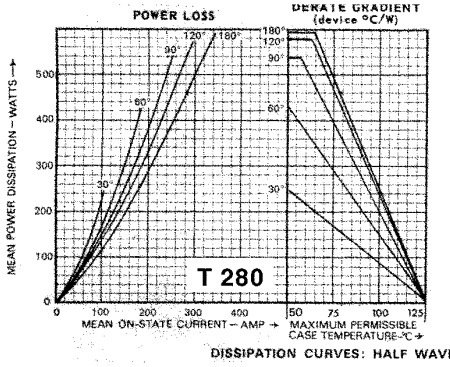
Symbol	Conditions	Values
$I_{T(AV)}$	Half wave resistive load; Tcase = 78 ˚C	280 A
I_{TSM}	Tvj = 125˚C; 10 ms half sine, V_R = 50% V_{RRM}	6400 A
I^2t	Tvj = 125 ˚C; 10 ms half sine	205000 A^2s
	Tvj = 125 ˚C; 3 ms half sine	163000 A^2s
I_{GT}	Tvj = 25 ˚C; V_{DRM} = 5V	150 mA
V_{GT}	Tvj = 25 ˚C; V_{DRM}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

* Higher dv/dt selection available on request

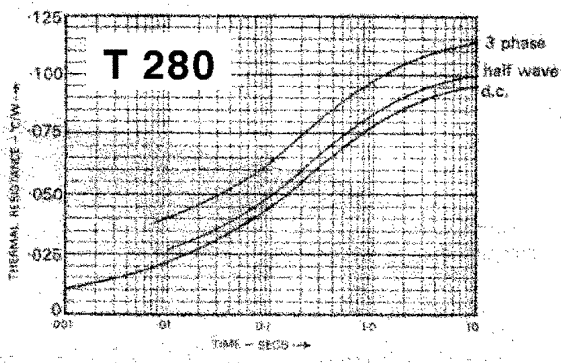
ISO 14001 CERTIFIED
AN ISO 9002 COMPANY



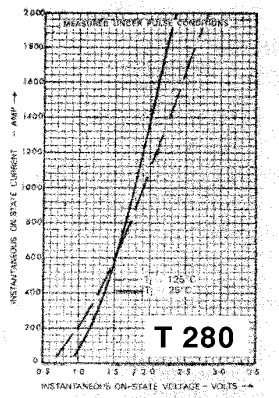
DISSIPATION CURVES: RECTANGULAR WAVEFORM



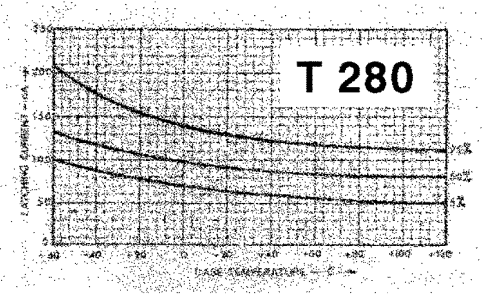
DISSIPATION CURVES: HALF WAVE



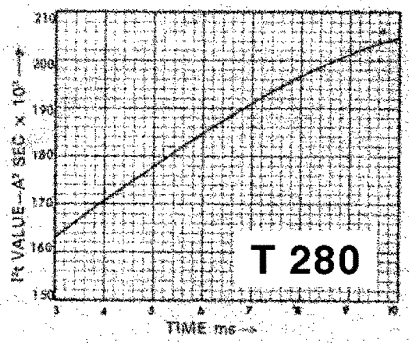
MAXIMUM (LIMIT) TRANSIENT THERMAL RESISTANCE



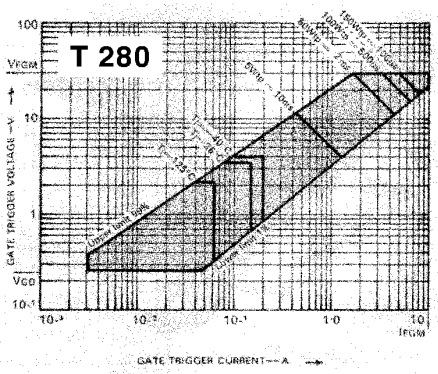
MAXIMUM (LIMIT) ON-STATE CHARACTERISTICS



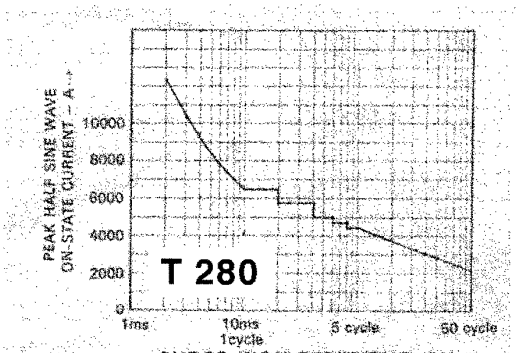
LATCHING CURRENT VERSUS CASE TEMPERATURE



I²t VERSUS TIME AT 125°C



GATE CHARACTERISTICS

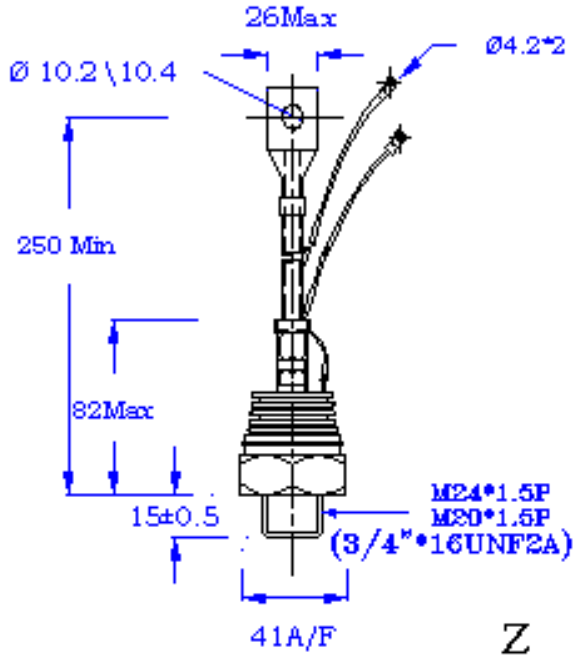


SURGE (NON-REPETITIVE) ON-STATE CURRENT VERSUS TIME (with 50% VRRM, Tcase 125°C)

PACAKAGE DEATILS

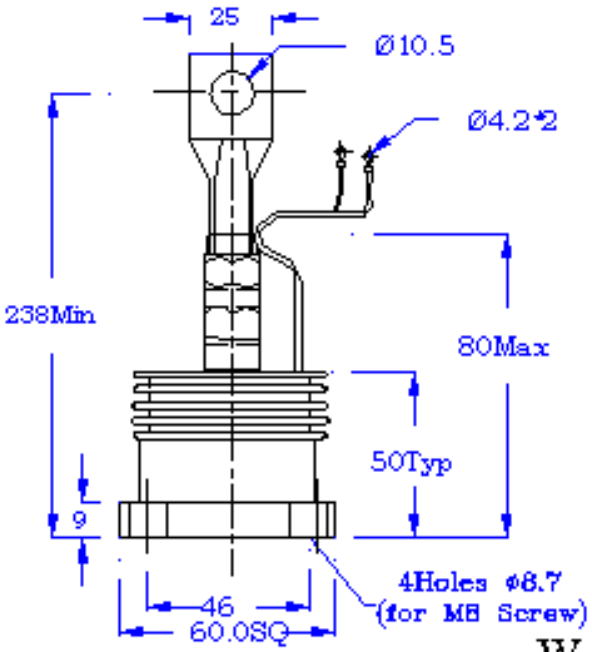
DO NOT SCALE

All Dimensions in mm



Z

Mounting Torque 60NM



W

Mounting Torque 15NM/Bolt