



Yangzhou Positioning Tech. Co., Ltd

HIGH POWER THYRISTOR ASSEMBLY

FOR PHASE CONTROL APPLICATIONS

Type: YZPST-KP641/16E-J035

Features:

- . All Diffused Structure
- . Amplifying Gate Configuration
- . Blocking capability up to 1600 volts
- . Guaranteed Maximum Turn-Off Time
- . High dV/dt Capability
- . Pressure Assembled Device

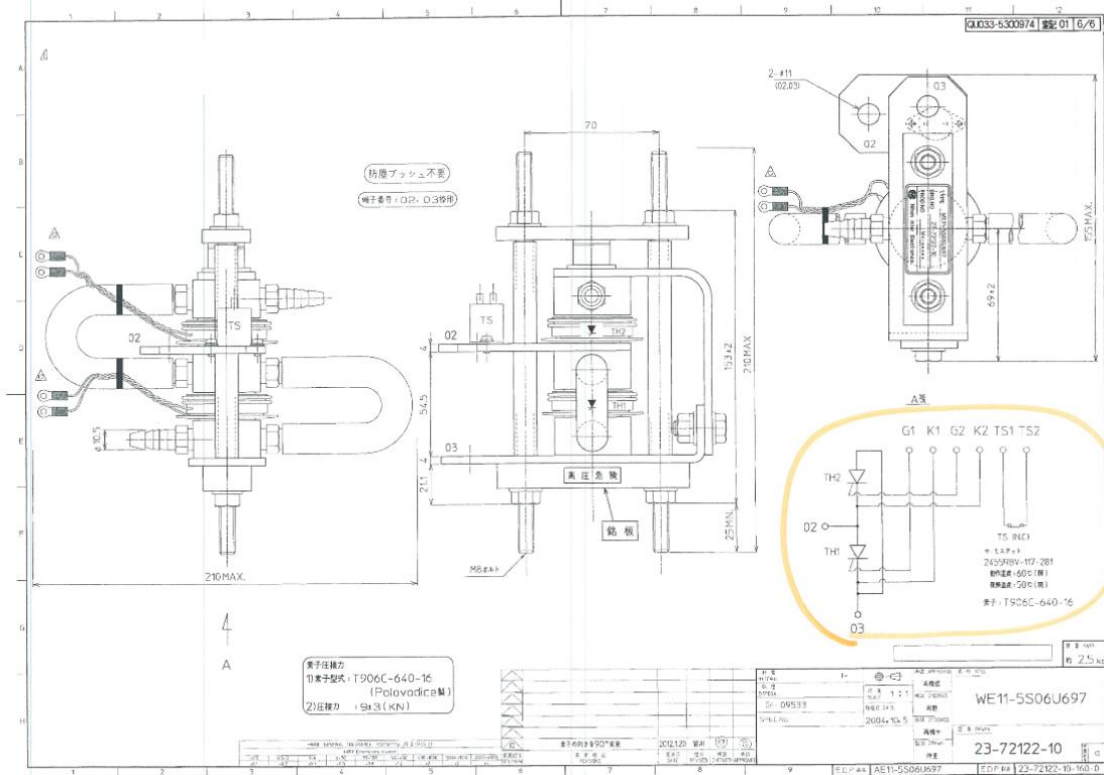
ELECTRICAL CHARACTERISTICS AND RATINGS

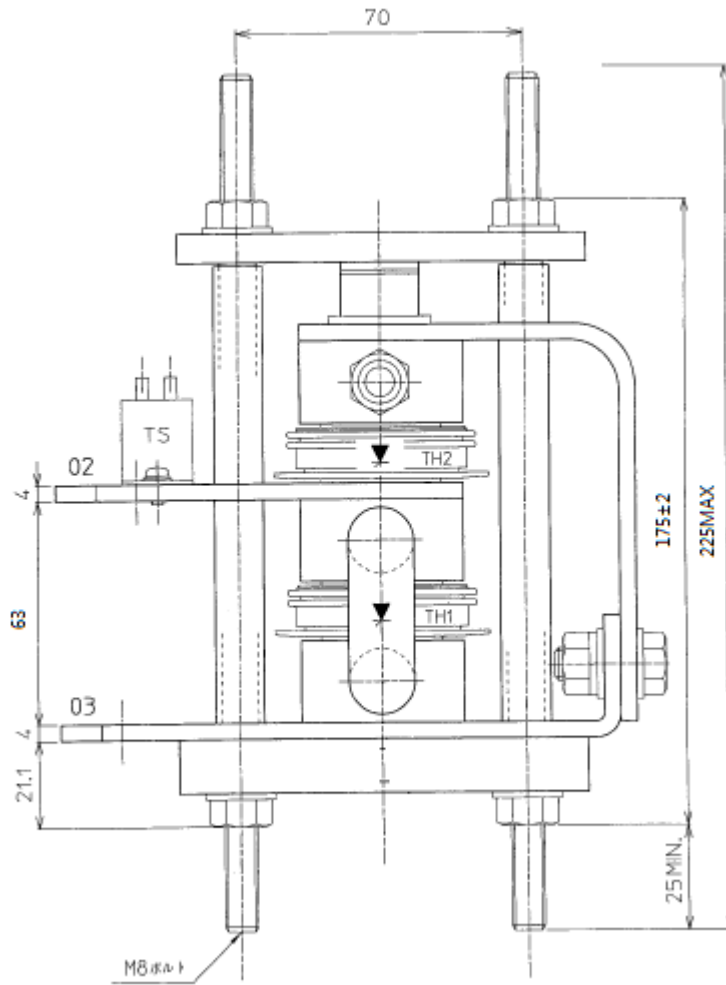
Parameter	Symbol	Maximum Limits	Units	Conditions
Repetitive peak reverse voltage	V_{RRM}	1600	V	
Repetitive peak off state voltage	V_{DRM}	1600	V	
Average value of on-state current	$I_{T(AV)}$	641	A	Sinewave, 180° conduction, $T_{sink} = 70\text{ }^{\circ}\text{C}$
Peak one cycle surge (non repetitive) current	I_{TSM}	9900	A	10.0 msec (50Hz), sinusoidal wave-shape, 180° conduction, $T_j = 125\text{ }^{\circ}\text{C}$
	I_{RRM}	30	mA	$T_j = 125\text{ }^{\circ}\text{C}$
	I_{DRM}	30	mA	$T_j = 125\text{ }^{\circ}\text{C}$
Peak on-state voltage	V_{TM}	1.5	V	$T_j = 125\text{ }^{\circ}\text{C}$ $I_{TM} = 1000\text{A}$
Threshold voltage	$V_{T(TO)}$	0.99	V	$T_j = 125\text{ }^{\circ}\text{C}$
Slope resistance	r_T	0.52	m Ω	$T_j = 125\text{ }^{\circ}\text{C}$
Average gate power dissipation	$P_{G(AV)}$	3	W	
Gate current	I_{GT}	300	mA	$V_D = 6\text{ V}$; $R_L = 3\text{ ohms}$; $T_j = +25\text{ }^{\circ}\text{C}$
Gate voltage	V_{GT}	3.5	V	$V_D = 6\text{ V}$; $R_L = 3\text{ ohms}$; $T_j = 0-125\text{ }^{\circ}\text{C}$
Latching current	I_L	1000	mA	$V_D = 24\text{ V}$; $R_L = 12\text{ ohms}$
Holding current	I_H	300	mA	$V_D = 24\text{ V}$; $I = 2.5\text{ A}$
Critical rate of voltage rise	dV/dt	1000	V/s	$V_D = 2/3 V_{DRM}$
Critical rate of rise of on-state current	di/dt	200	A/s	Switching from V_{DRM} 1000 V, non-repetitive
Operating temperature	T	-30-125	$^{\circ}\text{C}$	
Storage temperature	T_{stg}	-30-125	$^{\circ}\text{C}$	



Yangzhou Positioning Tech. Co., Ltd

CASE OUTLINE AND DIMENSIONS.





®

Tel: +86-514-87782298, 87782296

E-mail: info@yzpst.com;

Web Site: www.Pst888.com

www.yzpstcc.com

FAX: +86-514-87782297, 87367519

yzpst@pst888.com

www.yzpst.net

www.yzpst.com