

HIGH POWER THYRISTOR / THYRISTOR PHASE CONTROL MODULE

Features:

- . High Voltage Capability
- . Electrically Isolated Base Plate
- . High Surge Capability
- . High dv/dt Capability
- . Hard soldered Joints for high reliability

Typical Applications:

- . DC Motor Control (machine Tools, etc.)
- . AC Motor Soft Starters
- . Temperature Control (ovens, chemical & oil processes, etc)
- . Professional light Control & Dimming (studios, theatres, etc)
- . Input Converters & Induction Motors

ELECTRICAL CHARACTERISTICS AND RATINGS

Maximum Ratings

Symbol	Condition	Ratings	Unit
$I_T(AV)$	Single phase, half wave, 180° conduction, $T_c: 85C$	215	A
I_{TSM}	10ms, $T_j=125C$	6300	A
I^2t	10ms, $T_j=125C$	198000	A^2S
$(di/dt)_{cr}$	$T_j=125C$	100	A/us
Viso	A.C.1minute	3000	V
T_j		-40~+125	C
T_{stg}		-40~+125	C
W		850	g

Electrical Characteristics

Symbol	Condition	Ratings	Unit
V_{DRM}/V_{RRM}		2400	V
I_{DRM}	At V_{DRM} , Single phase, half wave, $T_j=125C$	50	mA
I_{RRM}	At V_{DRM} , Single phase, half wave, $T_j=125C$	50	mA
V_{TM}	On-State Current 800A, $T_j=125C$	1.90	V
I_{GT}	$T_j=25C$, $I_T=1A$, $V_D=6V$	200	mA
V_{GT}	$T_j=25C$, $I_T=1A$, $V_D=6V$	2	V
V_{GD}	$T_j=125C$, $V_D=1/2V_{DRM}$	0.25	V
DV/DT	$T_j=125C$, $V_D=2/3V_{DRM}$,	1000	V/us
I_H	$T_j=25C$, @ $V_d=6V$ RA=5	300 (max)	mA
I_L	$T_j=25C$, @ $V_d=6V$ RGK=>/=10 $I_{gm}=1A$ dig/dt- 1A/us tg=20us	1200(max)	mA
T_q	$T_j=125C$, $I_{TM}=I_{TAVM}$, $V_{DM}=0.67V_{DRM}$	300	us
$R_{th(j-c)}$	Per thyristor, sin180	0.15	C /W

STT215N24TOF

