

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
ITAVM	Single phase, half wave, 180° conduction, Tc: 85C	70	A
ITSM	10ms, Tj=125C	1450	A
I ² t	10ms, Tj=125C	10500	A ² S
(Di/DT) _{cr}	Tj=125C	100	A/us
Visol	A.C.1minute	3000	V
Tj		-40~+125	C
Tstg		-40~+125	C
W		220	g

Electrical Characteristics

Symbol	Condition	Ratings	Unit
V _{DRM} /V _{R_{RM}}		2400	V
I _{DRM}	AtV _{DRM} , Single phase, half wave, Tj=125C	25	mA
I _{R_{RM}}	AtV _{R_{RM}} , Single phase, half wave, Tj=125C	25	mA
V _{TM}	On-State Current 300A, Tj=125C	2.30	V
I _{GT}	Tj=25C , I _T =1A, V _D =6V	150	mA
V _{GT}	Tj=25C , I _T =1A, V _D =6V	3	V
V _{GD}	Tj=125C , V _D =1/2V _{DRM}	0.25	V
DV/DT	Tj=125C , V _D =2/3V _{DRM} ,	1000	V/us
I _H	Tj=25C , @ V _D =6V RA=5	300 (max)	mA
I _L	Tj=25C , @ V _d =6V RGK=>/=10 I _{gm} =1A dig/dt- 1A/us tg=20us	1200 (max)	mA
T _q	Tj=125C , I _{TM} =I _{TAVM} , V _{DM} =0.67V _{DRM}	300	us
R _{th(j-c)}	Per thyristor	0.35	C /W

STT70N24KOF

