

Thyristor Modules

TYPE: YZPST-MCMA140P1600TA

Features

- Industrial standard package
- Electrically insulated base plate
- Heat transfer through aluminium oxide ceramic insulated metal base plate
- Chip soldered on direct copper bonded AL_2O_3 ceramic
- Thyristor chip with center gate

Typical Applications

- DC motor control
- AC motor soft starters
- Temperature control
- Professional light dimming

V_{DRM}/V_{RRM}	$T_J=25^{\circ}C$	1600	V
V_{RSM}	$T_J=25^{\circ}C$	1700	V

Maximum Ratings

Symbol	Condition	Ratings	Unit
$I_{T(AV)}$	sin. 180; $T_c = 85^{\circ}C$,	140	A
I_{TRMS}	sin. 180; $T_c = 85^{\circ}C$,	220	A
I_{TSM}	$T_{vj} = 45^{\circ}C$; 10 ms	2400	A
I^2t	$T_{vj} = 45^{\circ}C$; 8,3...10 ms	28.8	kA^2S
$(di/dt)_{cr}$	non-repetitive	150	A/us
V_{iso}	A.C. 1s / 1min.	3600/3000	V
T_J		-40 ~ + 140	$^{\circ}C$
T_{stg}		-40 ~ + 125	$^{\circ}C$
W	About	81	g

Electrical Characteristics

Symbol	Condition	Ratings	Unit
I_{DRM} / I_{RRM}	At V_{DRM} , $T_J = 125^{\circ}C$	10	mA
V_T	On-State Current 150A, $T_J = 25^{\circ}C$	1.29	V
$V_{T(TO)}$	$T_J = 125^{\circ}C$	0.85	V
t_{gd}	$T_J = 25^{\circ}C$	2	us
t_q	$T_J = 100^{\circ}C$	185	us
I_{GT}/V_{GT}	$T_J = 25^{\circ}C$	150 / 1.5	mA/V
V_{GD}	$T_J = 125^{\circ}C$	0.2	V
$(dv/dt)_{cr}$	$T_J = 125^{\circ}C$	1000	V/us
I_H	$T_J = 25^{\circ}C$, max.	200	mA
I_L	$T_J = 25^{\circ}C$, max.	200	mA
$R_{th(j-c)}$	Per Module	0.22	K/W

Outline Drawing

