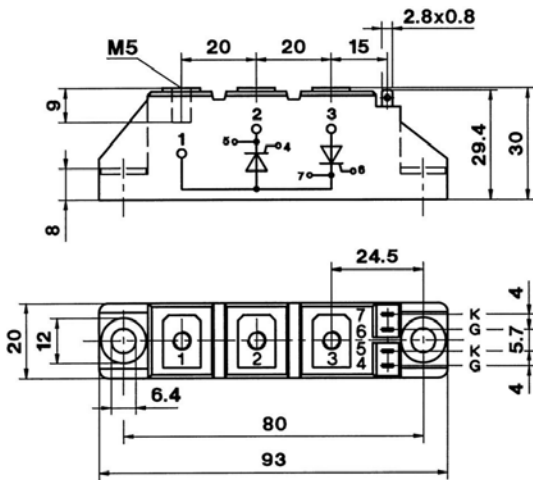


Thyristor Modules

TYPE:MTC55A1600V



V_{DRM}	V_{RRM}	V_{RSM}
1600V	1600V	1700V

Features

- Heat transfer through aluminium nitride ceramic isolated metal baseplate
- Precious metal pressure contacts for high reliability
- Thyristor with amplifying gate

Typical Applications

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

Symbol	Conditions	Values	Units
$I_{T(AV)}$	sin. 180; $T_C=85^\circ\text{C}$	55	A
$I_{F(AV)}$			
I_{RMS}		130/3x100	
I_{TSM}	$T_{vj}=25^\circ\text{C}$; 10ms	1500	A
I^2t	$T_{vj}=25^\circ\text{C}$; 8.3...10ms	11	KA ² s
V_T	$T_{vj}=25^\circ\text{C}$; $I_T=200\text{A}$	max. 1.65	V
I_{DD}	$T_{vj}=125^\circ\text{C}$; $V_{RD}=V_{RRM}$; $V_{DD}=V_{DRM}$	max. 15	mA
I_{RD}			
t_{gd}	$T_{vj}=25^\circ\text{C}$; $I_G=1\text{A}$; $di_G/dt=1\text{A}/\mu\text{s}$;	1	μs
t_{gr}	$V_D=2/3V_{DRM}$	2	
$(di/dt)_{cr}$	$T_{vj}=125^\circ\text{C}$	max. 150	A/ μs
$(dv/dt)_{cr}$	$T_{vj}=125^\circ\text{C}$	max. 1000	V/ μs
t_q	$T_{vj}=125^\circ\text{C}$	80	μs
I_H	$T_{vj}=25^\circ\text{C}$; typ. /max.	150/250	mA
I_L	$T_{vj}=25^\circ\text{C}$; $R_G=33\Omega$; typ. /max.	300/600	mA
V_{GT}	$T_{vj}=25^\circ\text{C}$; d.c.	min. 3	V
I_{GT}	$T_{vj}=25^\circ\text{C}$; d.c.	min. 150	mA
V_{GD}	$T_{vj}=125^\circ\text{C}$; d.c.	max. 0.25	V
I_{GD}	$T_{vj}=125^\circ\text{C}$; d.c.	max. 6	mA
$R_{th(j-c)}$	per thyristor /per module	0.57/0.29	K/W
$R_{th(c-s)}$	per thyristor /per module	0.2/0.1	K/W
T_{vj}		-40...+125	$^\circ\text{C}$
T_{stg}		-40...+125	$^\circ\text{C}$
V_{isol}	a.c. 50Hz; r.m.s.; 1s/1min.	3600/3000	V