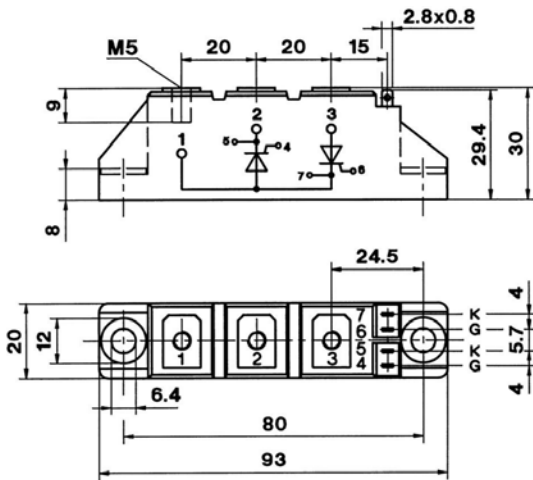


# Thyristor Modules

TYPE:MTC116A1600V



$V_{DRM}$	$V_{RRM}$	$V_{RSM}$
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; $T_C=85^\circ C$	116	A
$I_{RMS}$		210/3x140	
$I_{TSM}$	$T_{vj}=25^\circ C$ ; 10ms	2450	A
$I^2t$	$T_{vj}=25^\circ C$ ; 8.3...10ms	27	KA <sup>2</sup> s
$V_T$	$T_{vj}=25^\circ C$ ; $I_T=300A$	max. 1.65	V
$I_{DD}$	$T_{vj}=125^\circ C$ ; $V_{RD}=V_{RRM}$ ; $V_{DD}=V_{DRM}$	max. 20	mA
$I_{RD}$			
$t_{gd}$	$T_{vj}=25^\circ C$ ; $I_G=1A$ ; $di_G/dt=1A/\mu s$ ;	1	$\mu s$
$t_{gr}$	$V_D=2/3V_{DRM}$	2	
$(di/dt)_{cr}$	$T_{vj}=125^\circ C$	max. 150	A/ $\mu s$
$(dv/dt)_{cr}$	$T_{vj}=125^\circ C$	max. 1000	V/ $\mu s$
$t_q$	$T_{vj}=125^\circ C$	100	$\mu s$
$I_H$	$T_{vj}=25^\circ C$ ; typ. /max.	150/250	mA
$I_L$	$T_{vj}=25^\circ C$ ; $R_G=33\Omega$ ; typ. /max.	300/600	mA
$V_{GT}$	$T_{vj}=25^\circ C$ ; d.c.	min. 3	V
$I_{GT}$	$T_{vj}=25^\circ C$ ; d.c.	min. 150	mA
$V_{GD}$	$T_{vj}=125^\circ C$ ; d.c.	max. 0.25	V
$I_{GD}$	$T_{vj}=125^\circ C$ ; d.c.	max. 6	mA
$R_{th(j-c)}$	per thyristor /per module	0.28/0.14	K/W
$R_{th(c-s)}$	per thyristor /per module	0.2/0.1	K/W
$T_{vj}$		-40...+125	$^\circ C$
$T_{stg}$		-40...+125	$^\circ C$
$V_{isol}$	a.c. 50Hz; r.m.s.; 1s/1min.	3600/3000	V