

## 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
- Temperature control
- Professional light dimming

## Maximum Ratings

Symbol	Condition	Ratings	Unit
$I_{T(AV)}$	Single phase, half wave, sin 180° conduction ; $T_C=70^{\circ}C$	25	A
$I_{TRMS}$	Single phase, half wave, sin 180° conduction	39	A
$I_{TSM}$	$T_j = T_{j\ MAX}$	0.45	kA
$I^2t$	$T_j = T_{j\ MAX}$	1.04	kA <sup>2</sup> S
$V_{DRM}/V_{RRM}$	$T_j = T_{j\ MAX}$	600	V
di/dt	non-repetitive	100	A/us
$V_{iso}$	A.C.1minute/1S	2000	V
$T_j$		-40 ~ + 125	°C
$T_{stg}$		-40 ~ + 125	°C
W	About	23	g

## Electrical Characteristics

Symbol	Condition	Ratings	Unit
$I_{DRM} / I_{RRM}$	At $V_{DRM}$ , Single phase, half wave, $T_j = T_{j\ MAX}$	5	mA
$V_{TM}$	On-State Current 78A, $T_j = 25^{\circ}C$	1.40	V
$V_{T(TO)}$	$T_j = T_{j\ MAX}$	-	V
$r_T$	$T_j = T_{j\ MAX}$	-	mΩ
$R_{K1G1}$		-	Ω
$R_{K2G2}$		-	Ω
$t_{gd}$	$T_j = 25^{\circ}C; V_D = 0.4V_{DRM}; I_{TM} = I_{TAV}$	-	us
$t_q$	$dv_D/dt = 50V/us; T_j = T_{j\ MAX}; I_{TM} = I_{TAV}$	-	us
$I_{GT}/V_{GT}$	$T_j = 25^{\circ}C, I_T = 1A, V_D = 6V$	40 / 3.0	mA/V
$V_{GD}$	$V_D = 67\%V_{DRM}$	0.2	V
DV/DT	$V_D = 67\%V_{DRM}$	100	V/us
$I_H$	$T_j = 25^{\circ}C$	30	mA
$I_L$	$T_j = 25^{\circ}C$	-	mA
$R_{th(j-c)}$	Thermal resistance Junction to case; per module	1.6	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink; per module	-	K/W

Outline Drawing

