

## 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
$I_{T(AV)M}$	Single phase, half wave, sin 180° conduction ; $T_C=85^{\circ}C$	320	A
$I_{TRMSM}$	Single phase, half wave, sin 180° conduction	520	A
$I_{TSM}$	$T_j = T_{j\ MAX}$	8.2	kA
$I^2t$	$T_j = T_{j\ MAX}$	335	kA <sup>2</sup> S
$V_{DRM}/V_{RRM}$	$T_j = T_{j\ MAX}$	1600	V
di/dt	non-repetitive	100	A/us
$V_{iso}$	A.C.1minute/1S	3000/3600	V
$T_j$		-40 ~ + 130	°C
$T_{stg}$		-40 ~ + 130	°C
W	About	410	g

## Electrical Characteristics

Symbol	Condition	Ratings	Unit
$I_{DRM} / I_{RRM}$	At $V_{DRM}$ , Single phase, half wave, $T_j = T_{j\ MAX}$	60	mA
$V_{TM}$	On-State Current 750A, $T_j = 130^{\circ}C$	1.47	V
$V_{T(TO)}$	$T_j = T_{j\ MAX}$	0.77	V
$r_T$	$T_j = T_{j\ MAX}$	0.58	mΩ
$R_{K1G1}$		-	Ω
$R_{K2G2}$		-	Ω
$t_{gd}$	$T_j = 25^{\circ}C; V_D = 0.4V_{DRM}; I_{TM} = I_{TAV}$	2	us
$t_q$	$dv_D/dt = 50V/us; T_j = T_{j\ MAX}; I_{TM} = I_{TAV}$	200	us
$I_{GT}/V_{GT}$	$T_j = 25^{\circ}C, I_T = 1A, V_D = 6V$	150 / 2.0	mA/V
$V_{GD}$	$V_D = 67\%V_{DRM}$	0.25	V
DV/DT	$V_D = 67\%V_{DRM}$	1000	V/us
$I_H$	$T_j = 25^{\circ}C$	150	mA
$I_L$	$T_j = 25^{\circ}C$	380	mA
$R_{th(j-c)}$	Thermal resistance Junction to case; per module	0.055	K/W
$R_{th(c-h)}$	Thermal resistance case to heatsink; per module	0.0275	K/W

