

TYPE: MCD215-20io1

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}	$T_j=25^\circ C$	2000	V
V_{RSM}	$T_j=25^\circ C$	2100	V

Maximum Ratings

Symbol	Condition	Ratings	Unit
$I_{T(AV)}$	sin. 180; $T_c = 85^\circ C$,	215	A
I_{TRMS}	sin. 180; $T_c = 125^\circ C$,	340	A
I_{TSM}	$T_{vj} = 45^\circ C$; 10 ms	8000	A
	$T_{vj} = 125^\circ C$; 10 ms	6800	A
I^2t	$T_{vj} = 45^\circ C$; 8,3...10 ms	320	kA^2S
$(di/dt)_{cr}$	non-repetitive	100	A/us
V_{iso}	A.C. 1s / 1min.	3600/3000	V
T_j		-40 ~ + 125	$^\circ C$
T_{stg}		-40 ~ + 125	$^\circ C$
W	About	150	g

Electrical Characteristics

Symbol	Condition	Ratings	Unit
I_{DRM} / I_{RRM}	AtV_{DRM} , $T_j = 125^\circ C$	15	mA
V_T	On-State Current 200A, $T_j = 25^\circ C$	1.20	V
$V_{T(TO)}$	$T_j = 125^\circ C$	0.80	V
t_{gd}	$T_j = 25^\circ C$	2	us
t_q	$T_j = 100^\circ C$	200	us
I_{GT}/V_{GT}	$T_j = 25^\circ C$	150 / 2.0	mA/V
V_{GD}	$T_j = 125^\circ C$	0.25	V
$(dv/dt)_{cr}$	$T_j = 125^\circ C$	1000	V/us
I_H	$T_j = 25^\circ C$, max.	150	mA
I_L	$T_j = 25^\circ C$, max.	200	mA
$R_{th(j-c)}$	Per Module	0.13	K/W

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Outline Drawing

