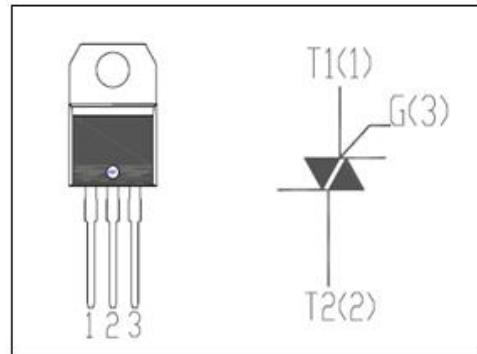


# isc Triacs

# MAC210A8

## FEATURES

- With TO-220AB insulated package.
- Suitable for general purpose AC switching which can be used as an ON/OFF function in applications such as static relays, heating regulation, induction motor starting circuits. Or for phase control operation in light dimmers, motor speed controllers etc.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.



## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	MIN	UNIT
V <sub>DRM</sub>	Repetitive peak off-state voltage	600	V
V <sub>R<sub>RRM</sub></sub>	Repetitive peak off-state voltage	600	V
I <sub>T(RMS)</sub>	RMS on-state current (full sine wave)	10	A
I <sub>TSM</sub>	Non-repetitive peak on-state current t <sub>p</sub> =20ms	100	A
T <sub>j</sub>	Operating junction temperature	-40~125	°C
T <sub>stg</sub>	Storage temperature	-40~150	°C
R <sub>th(j-c)</sub>	Thermal resistance, junction to case	2	°C/W
R <sub>th(j-a)</sub>	Thermal resistance, junction to ambient	62.5	°C/W

## ELECTRICAL CHARACTERISTICS (T<sub>c</sub>=25°C unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT	
I <sub>R<sub>RRM</sub></sub>	Repetitive peak reverse current	V <sub>R</sub> =V <sub>R<sub>RRM</sub></sub> , V <sub>R</sub> =V <sub>R<sub>RRM</sub></sub> , T <sub>j</sub> =125°C	0.01 2	mA	
I <sub>DRM</sub>	Repetitive peak off-state current	V <sub>D</sub> =V <sub>DRM</sub> , V <sub>D</sub> =V <sub>DRM</sub> , T <sub>j</sub> =125°C	0.01 2	mA	
I <sub>GT</sub>	Gate trigger current	V <sub>D</sub> =12V; R <sub>L</sub> = 100 Ω	I	50	mA
			II	50	
			III	50	
			IV	75	
I <sub>H</sub>	Holding current	V <sub>D</sub> =12V, I <sub>GT</sub> = 0.2A, Gate Open	50	mA	
V <sub>GT</sub>	Gate trigger voltage all quadrant	V <sub>D</sub> =12V; R <sub>L</sub> = 100 Ω	2	V	
V <sub>TM</sub>	On-state voltage	I <sub>T</sub> = 14A	1.65	V	

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