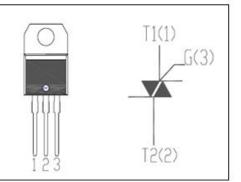




# BTA12-400C

### 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
Vdrm	Repetitive peak off-state voltage	400	V
V <sub>RRM</sub>	Repetitive peak off-state voltage	400	V
I <sub>T(RMS)</sub>	RMS on-state current (full sine wave)Tj=90 $^\circ\!\mathrm{C}$	12	А
I <sub>TSM</sub>	Non-repetitive peak on-state current t <sub>p</sub> =20ms	120	А
Tj	Operating junction temperature	125	°C
T <sub>stg</sub>	Storage temperature	-40~150	°C
R <sub>th(j-c)</sub>	Thermal resistance, junction to case	2.3	°C/W
R <sub>th(j-a)</sub>	Thermal resistance, junction to ambient	60	°C/W

## ELECTRICAL CHARACTERISTICS (Tc=25 $^{\circ}{\rm C}$ unless otherwise specified)

SYMBOL	PARAMETER		CONDITIONS	МАХ	UNIT
I <sub>RRM</sub>	Repetitive peak reverse current		V <sub>R</sub> =V <sub>RRM</sub> ,Tj=25℃ V <sub>R</sub> =V <sub>RRM</sub> , Tj=125℃	0.005 1	mA
I <sub>DRM</sub>	Repetitive peak off-state current		V <sub>D</sub> =V <sub>DRM</sub> , Tj=25℃ V <sub>D</sub> =V <sub>DRM</sub> , Tj=125℃	0.005 1	mA
I <sub>GT</sub>		Ι	- V <sub>D</sub> =12V; R <sub>L</sub> = 30 Ω	25	mA
	Gate trigger current	II		25	
		III		25	
		IV		50	
l <sub>Η</sub>	Holding current		I <sub>GT</sub> = 0.5A, Gate Open	25	mA
V <sub>GT</sub>	Gate trigger voltage all quadrant		V <sub>D</sub> =12V; R <sub>L</sub> = 30 Ω	1.3	V
V <sub>TM</sub>	On-state voltage		I <sub>T</sub> = 17A; t <sub>p</sub> = 380 μ s	1.55	V

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