

### **BTA06-600TW**

#### FEATURES

- With TO-220 insulated package
- Suitable for AC switching operations, 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 in light dimmers, motor speed controllers etc.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

# T1(1) G(3) T2(2) TO-220 package

#### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	MIN	UNIT
V <sub>DRM</sub>	Repetitive peak off-state voltage	600	V
I <sub>T(RMS)</sub>	RMS on-state current (full sine wave;Tmb≤107℃)	6	А
I <sub>TSM</sub>	Non-repetitive peak on-state current(Tj=25°C;Tp=20ms)	60	А
l <sup>2</sup> t	I <sup>2</sup> t for fusing tp=10ms;sine-wave pulse	21	A <sup>2</sup> S
dl/dt	Tj=125℃	50	A/us
I <sub>GM</sub>	Peak gate current	4	А
P <sub>G(AV)</sub>	Average gate power dissipation	1	W
Tj	Operating junction temperature	-40~125	°C
T <sub>stg</sub>	Storage temperature		°C



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SYMBOL	PARAMETER		CONDITIONS	МАХ	UNIT
I <sub>GT</sub>	Gate trigger current	Ι	- V <sub>D</sub> =12V; I <sub>T</sub> = 0.1A, - TJ=25℃	5	mA
		II		5	
		III		5	
$V_{\text{GT}}$	Gate trigger voltage		V <sub>D</sub> =12V; I <sub>T</sub> = 0.1A	1.3	V
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> , Tj=125℃	5 1000	uA
V <sub>TM</sub>	On-state voltage		Ι <sub>τ</sub> = 5.5A	1.55	V
I <sub>H</sub>	Holding current		$I_{GT}$ = 0.1A, V <sub>D</sub> = 12V	10	mA

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

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