

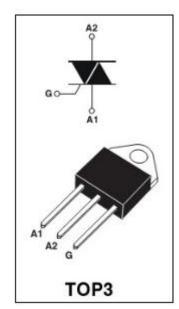
isc Triacs BTA41-600B

## **FEATURES**

- With TOP3 insulated package
- Suitable for general purpose where high surge current capability is required.
   Application such as phase control and tatic switching on inductive or resistive load.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	MIN	UNIT
$V_{DRM}$	Repetitive peak off-state voltage	600	V
$V_{RRM}$	Repetitive peak reverse voltage	600	V
I <sub>T(RMS)</sub>	RMS on-state current (full sine wave)T <sub>j</sub> =80℃	41	Α
I <sub>TSM</sub>	Non-repetitive peak on-state current t <sub>p</sub> =20ms	410	Α
Tj	Operating junction temperature	125	$^{\circ}$
T <sub>stg</sub>	Storage temperature	-40~150	$^{\circ}$
$P_{G(AV)}$	Average gate power dissipation(T <sub>j</sub> =125℃)	1	W
R <sub>th(j-c)</sub>	Thermal resistance, junction to case	0.9	°C/W
R <sub>th(j-a)</sub>	Thermal resistance, junction to ambient	50	°C/W



## **ELECTRICAL CHARACTERISTICS (Tc=25℃ unless otherwise specified)**

SYMBOL	PARAMETER		CONDITIONS	MAX	UNIT
I <sub>RRM</sub>	Repetitive peak reverse current		V <sub>R</sub> =V <sub>RRM</sub> , V <sub>R</sub> =V <sub>RRM</sub> , Tj=125°C	0.005 5.0	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> , Tj=125°C	0.005 5.0	mA
I <sub>GT</sub>	Gate trigger current  II  IV		50		
		II	V <sub>D</sub> =12V; R <sub>L</sub> = 100 Ω	50	mA
		III		50	
		IV		100	
I <sub>H</sub>	Holding current		I <sub>GT</sub> = 0.5A, Gate Open	80	mA
V <sub>GT</sub>	Gate trigger voltage all quadrant		V <sub>D</sub> =12V; R <sub>L</sub> = 100 Ω	1.3	V
V <sub>TM</sub>	On-state voltage		I <sub>TM</sub> = 60A; t <sub>p</sub> = 380 μ s	1.55	V



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