

isc Triacs

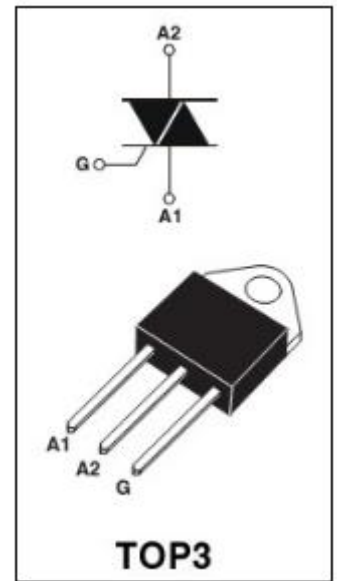
BTA41-700B

FEATURES

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

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	MIN	UNIT
V_{DRM}	Repetitive peak off-state voltage	700	V
V_{RRM}	Repetitive peak reverse voltage	700	V
$I_{T(RMS)}$	RMS on-state current (full sine wave) $T_j=80^\circ\text{C}$	41	A
I_{TSM}	Non-repetitive peak on-state current $t_p=20\text{ms}$	410	A
T_j	Operating junction temperature	125	°C
T_{stg}	Storage temperature	-40~150	°C
$P_{G(AV)}$	Average gate power dissipation($T_j=125^\circ\text{C}$)	1	W
$R_{th(j-c)}$	Thermal resistance, junction to case	0.9	°C/W
$R_{th(j-a)}$	Thermal resistance, junction to ambient	50	°C/W

ELECTRICAL CHARACTERISTICS ($T_c=25^\circ\text{C}$ unless otherwise specified)

SYMBOL	PARAMETER		CONDITIONS	MAX	UNIT
I_{RRM}	Repetitive peak reverse current		$V_R=V_{RRM}$, $V_R=V_{RRM}$, $T_j=125^\circ\text{C}$	0.005 5.0	mA
I_{DRM}	Repetitive peak off-state current		$V_D=V_{DRM}$, $V_D=V_{DRM}$, $T_j=125^\circ\text{C}$	0.005 5.0	mA
I_{GT}	Gate trigger current	I	$V_D=12\text{V}$; $R_L=100\ \Omega$	50	mA
		II		50	
		III		50	
		IV		100	
I_H	Holding current		$I_{GT}=0.5\text{A}$, Gate Open	80	mA
V_{GT}	Gate trigger voltage all quadrant		$V_D=12\text{V}$; $R_L=100\ \Omega$	1.3	V
V_{TM}	On-state voltage		$I_{TM}=60\text{A}$; $t_p=380\ \mu\text{s}$	1.55	V

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