

isc Thyristors

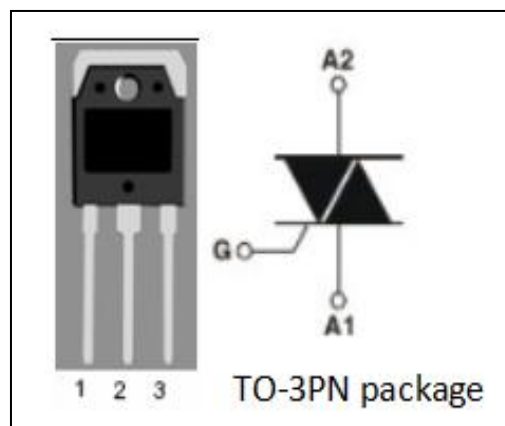
BTA41-400B

DESCRIPTION

- With TO-3PN packaging
- Can be operated in 4 quadrants
- Advanced technology to provide customers with high commutation performances
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching applications
- Phase control
- Static switching on inductive or resistive load

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER		MAX	UNIT
V_{DRM}	Repetitive peak off-state voltage		600	V
V_{RRM}	Repetitive peak reverse voltage		600	V
$I_{\text{T(RSM)}}$	Average on-state current	$T_c=75^{\circ}\text{C}$	40	A
I_{TSM}	Surge non-repetitive on-state current	50HZ 60HZ	315 300	A
$P_{\text{G(AV)}}$	Average gate power dissipation (over any 20 ms period)		1	W
T_j	Operating junction temperature		-40~125	$^{\circ}\text{C}$
T_{stg}	Storage temperature		-40~150	$^{\circ}\text{C}$

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

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
I_{RRM}	Repetitive peak reverse current	$V_R=V_{RRM}$ Rated; $V_D=V_{DRM}$ Rated;	$T_j=25^\circ\text{C}$ $T_j=125^\circ\text{C}$		0.01 6	mA
I_{DRM}	Repetitive peak off-state current					
V_{TM}	On-state voltage	$I_T=60\text{A}; t_p=380\ \mu\text{s}$			1.8	V
I_{GT}	Gate-trigger current	$V_D=12\text{V}; R_L=33\Omega;$	I		50	mA
			II		50	
			III		50	
			IV		100	
V_{GT}	Gate-trigger voltage	$V_D=12\text{V}; R_L=33\Omega;$			1.5	V
$R_{th(j-c)}$	Junction to case				1.2	$^\circ\text{C}/\text{W}$

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