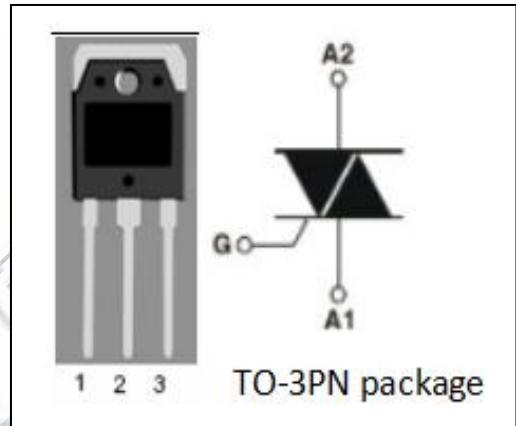


isc Thyristors

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
$I_{T(RSM)}$	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
$P_{G(AV)}$	Average gate power dissipation (over any 20 ms period)	1	W
T_j	Operating junction temperature	-40~125	°C
T_{stg}	Storage temperature	-40~150	°C

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	°C/W