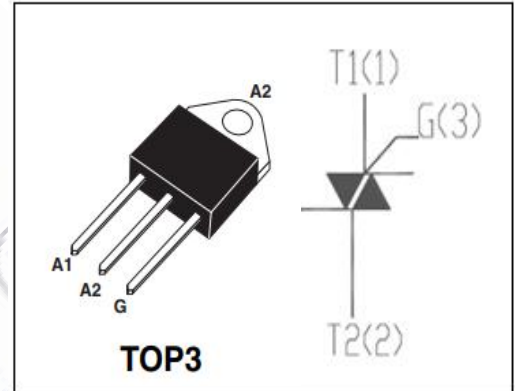


isc Thyristors
BTB41-600B
DESCRIPTION

- With TO-P3 packaging
- Operating in 4 quadrants
- High commutation capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Solid state relays; heating and cooking appliances
- Switching applications


ABSOLUTE MAXIMUM RATINGS (T_a=25°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 =90°C	40	A
I _{TSM}	Surge non-repetitive on-state current	400 420	A
P _{G(AV)}	Average gate power dissipation (over any 20 ms period)	1.0	W
T _j	Operating junction temperature	-40~125	°C
T _{stg}	Storage temperature	-40~150	°C

ELECTRICAL CHARACTERISTICS (T_c=25°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°C T _j =125°C		0.005	mA
I _{DRM}	Repetitive peak off-state current		5		
V _{TM}	On-state voltage	I _T =60A		1.55	V
I _{GT}	Gate-trigger current	V _D = 12V; RG=33 Ω	I	50	mA
			II	50	
			III	50	
			IV	100	
V _{GT}	Gate-trigger voltage	V _D = 12V; RG=33 Ω		1.3	V
R _{th(j-c)}	Junction to case	Half cycle		0.9	°C/W