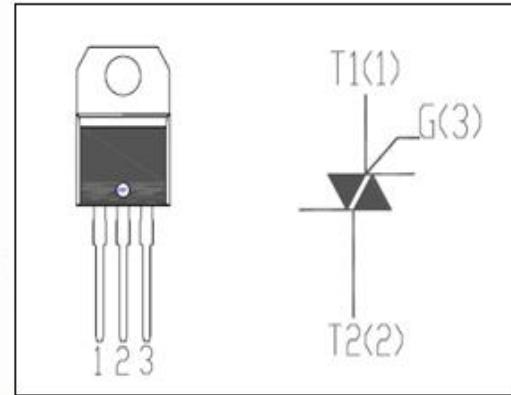


isc Thyristors
BTA12-800BW
DESCRIPTION

- With TO-220 packaging
- Operating in 3 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($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	MAX	UNIT
V_{DRM}	Repetitive peak off-state voltage	800	V
V_{RRM}	Repetitive peak reverse voltage	800	V
$I_{T(RSM)}$	Average on-state current @ $T_c=90^\circ\text{C}$	12	A
I_{TSM}	Surge non-repetitive on-state current 50HZ 60HZ	120 126	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 ($T_c=25^\circ\text{C}$ 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;	$T_j=25^\circ\text{C}$ $T_j=125^\circ\text{C}$	0.005 1	mA
I_{DRM}	Repetitive peak off-state current				
V_{TM}	On-state voltage	$I_T=17\text{A}$		1.55	V
I_{GT}	Gate-trigger current	$V_D = 12\text{V}; RG = 30 \Omega$	I	50	mA
			II	50	
			III	50	
V_{GT}	Gate-trigger voltage	$V_D = 12\text{V}; RG = 30 \Omega$		1.3	V
$R_{th(j-c)}$	Junction to case	Half cycle		2.3	°C/W