

isc Thyristors

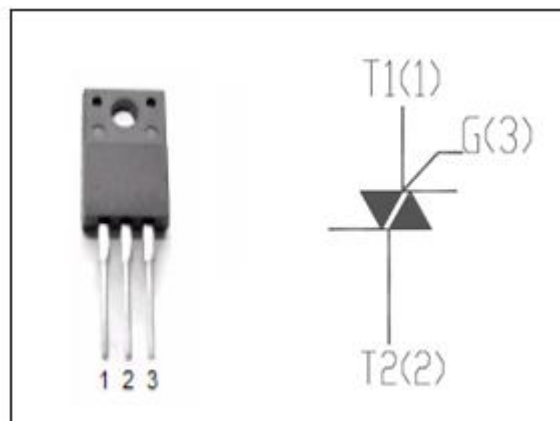
BTA312X-600D

DESCRIPTION

- With TO-220F packaging
- High operating junction temperature
- Very high commutation performance maximized at each gate sensitivity
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High temperature, high power motor control
- Solid state relays; heating and cooking appliances
- Switching applications

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

SYMBOL	PARAMETER		MIN	UNIT
V_{DRM}	Repetitive peak off-state voltage		600	V
V_{RRM}	Repetitive peak reverse voltage		600	V
$I_{\text{T(AV)}}$	Average on-state current		12	A
I_{TSM}	Surge non-repetitive on-state current	50HZ 60HZ	95 105	A
$P_{\text{G(AV)}}$	Average gate power dissipation (over any 20 ms period)		0.5	W
T_j	Operating junction temperature		-40~150	$^{\circ}\text{C}$
T_{stg}	Storage temperature		-40~150	$^{\circ}\text{C}$

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;	$T_J=125^{\circ}\text{C}$		0.5	mA
I_{DRM}	Repetitive peak off-state current					
V_{TM}	On-state voltage	$I_T=15\text{A}$			1.6	V
I_{GT}	Gate-trigger current	$V_D=12\text{V}; I_T=0.1\text{A};$	I		5	mA
			II		5	
			III		5	
V_{GT}	Gate-trigger voltage	$V_D=12\text{V}; I_T=0.1\text{A};$			1.5	V

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