

isc Thyristors

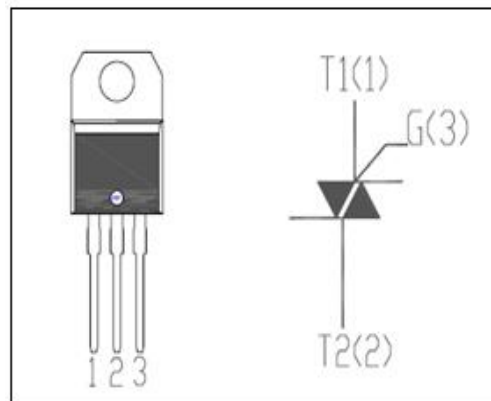
BTA330X-800BT

DESCRIPTION

- With TO-3PN packaging
- Can be operated in 3 quadrants
- High voltage capability;high current capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Applications subject to high temperature
- Heating controls; high power motor control
- High power switching


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
$I_{\text{T(RSM)}}$	RSM average on-state current	$T_c=44^{\circ}\text{C}$	30	A
I_{TSM}	Surge non-repetitive on-state current	50HZ 60HZ	270 297	A
$P_{\text{G(AV)}}$	Average gate power dissipation (over any 20 ms period) @ $T_c=125^{\circ}\text{C}$		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°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		5	μ A
I _{DRM}	Repetitive peak off-state current				3	mA
V _{TM}	On-state voltage	I _T =42A;t _P =380 μ s			1.55	V
I _{GT}	Gate-trigger current	V _D =12V;I _T =0.1A;	I		50	mA
			II		50	
			III		50	
V _{GT}	Gate-trigger voltage	V _D =12V;I _T =0.1A;			1.3	V
R _{th} (j-c)	Junction to case				2.8	°C/W

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