

isc Thyristors

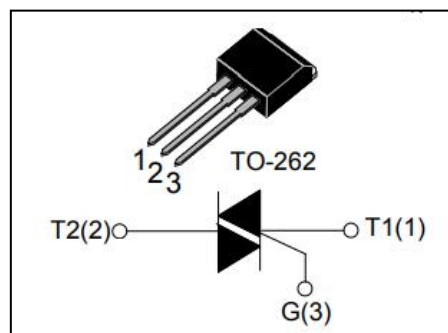
BTA312G-600CT

DESCRIPTION

- 3Q technology for improved noise immunity
- High operating junction temperature
- High voltage capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Applications subject to high temperature
- Electronic thermostats (heating and cooling)
- High power motor controls e.g. washing machines and vacuum cleaners


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
$I_{\text{T(RMS)}}$	RMS on-state current	12	A
I_{TSM}	Surge non-repetitive on-state current , $t_p=20\text{ms}$	100	A
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 =150°C		2	mA
I _{DRM}	Repetitive peak off-state current					
V _{TM}	On-state voltage	I _T =15A			1.6	V
I _{GT}	Gate-trigger current	V _D =12V;I _T =0.1A;	I		35	mA
			II		35	
			III		35	
V _{GT}	Gate-trigger voltage	V _D =12V;I _T =0.1A;			1.5	V
I _H	Holding current	V _D =12V;I _T =0.1A;			35	mA

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