

isc Thyristors

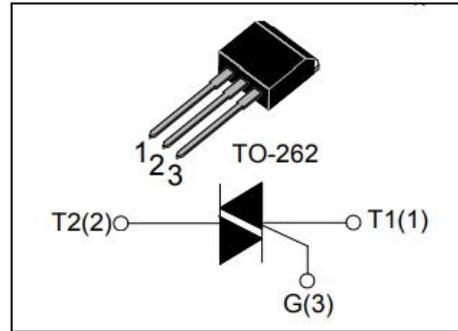
BTA312G-600CT

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°C)

SYMBOL	PARAMETER	MIN	UNIT
V _{DRM}	Repetitive peak off-state voltage	600	V
V _{RRM}	Repetitive peak reverse voltage	600	V
I _{T(RMS)}	RMS on-state current	12	A
I _{TSM}	Surge non-repetitive on-state current ,tp=20ms	100	A
T _j	Operating junction temperature	-40~150	°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 =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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