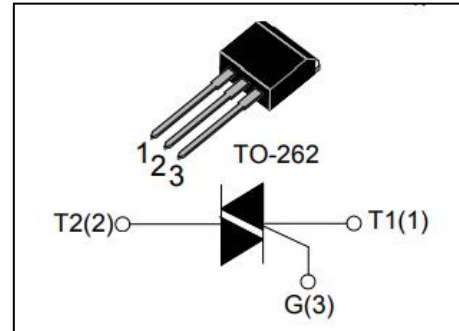


isc Thyristors
BTA312G-600CT
DESCRIPTION

- 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	$V_R=V_{\text{RRM}}$ Rated; $V_D=V_{\text{DRM}}$ Rated;	$T_j=150^{\circ}\text{C}$		2	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		35	mA
			II		35	
			III		35	
V_{GT}	Gate-trigger voltage	$V_D=12\text{V}; I_T=0.1\text{A};$			1.5	V
I_{H}	Holding current	$V_D=12\text{V}; I_T=0.1\text{A};$			35	mA



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