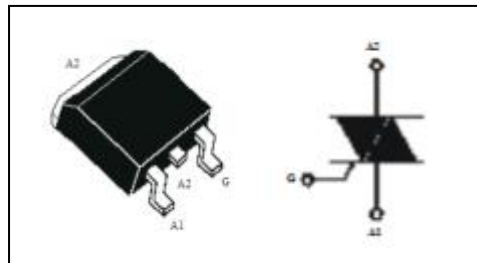


## isc Thyristors

## BTA316B-600C

## APPLICATIONS

- With TO-263 package.
- Be suitable for general purpose AC switching, they can be used as an ON/OFF function in applications.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

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

SYMBOL	PARAMETER	MIN	UNIT
$V_{\text{DRM}}$	Repetitive peak off-state voltage	600	V
$V_{\text{RRM}}$	Repetitive peak reverse voltage	800	V
$I_{\text{T(RMS)}}$	RMS on-state current full sine wave; $T_{\text{mb}} \leq 101^{\circ}\text{C}$	16	A
$I_{\text{TSM}}$	Surge non-repetitive on-state current $t=20\text{ms}$ $t=16.7\text{ms}$	140 150	A
$P_{\text{G(AV)}}$	Average gate power dissipation (over any 20 ms period )	0.5	W
$T_{\text{j}}$	Operating junction temperature	125	$^{\circ}\text{C}$
$T_{\text{stg}}$	Storage temperature	-40~150	$^{\circ}\text{C}$

## isc Thyristors

## BTA316B-600C

ELECTRICAL CHARACTERISTICS ( $T_c=25^\circ\text{C}$  unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
$I_{RRM}$	Repetitive peak reverse current	$V_R=V_{RRM}$	$T_j=125^\circ\text{C}$		0.5	mA
$I_{DRM}$	Repetitive peak off-state current	$V_D=V_{DRM}$	$T_j=125^\circ\text{C}$		0.5	mA
$V_{TM}$	On-state voltage	$I_{TM}=18\text{A}$			1.5	V
$I_{GT}$	Gate-trigger current Quadrant (I - II - III)	$V_D=12\text{V}; I_T=0.1\text{A}$			35	mA
$V_{GT}$	Gate-trigger voltage Quadrant (I - II - III)	$V_D=12\text{V}; I_T=0.1\text{A}$			1.5	V
$R_{th(j-mb)}$	Thermal resistance	Half cycle Full cycle			1.7 1.2	$^\circ\text{C/W}$

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