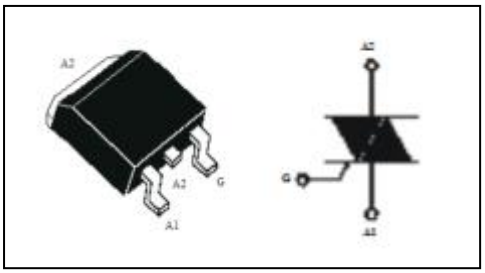
isc Thyristors BTA316B-600C

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℃)

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

ELECTRICAL CHARACTERISTICS (T_C=25℃ unless otherwise specified)

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