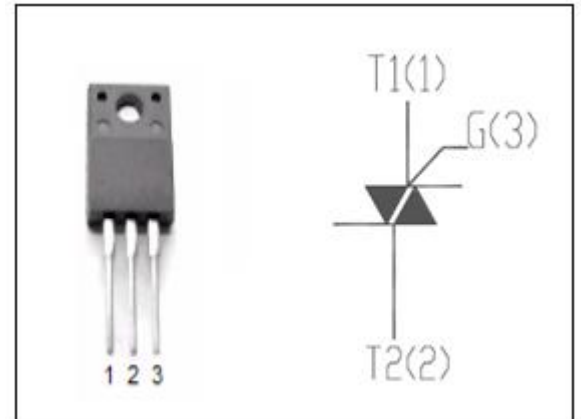


isc Thyristors
BT139X-600E
DESCRIPTION

- With TO-220F packaging
- Operating in 4 quadrants
- Very high commutation performance maximized at each gate sensitivity
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Solid state relays; heating and cooking appliances
- Switching applications


ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER		MAX	UNIT
V _{DRM}	Repetitive peak off-state voltage		600	V
V _{RRM}	Repetitive peak reverse voltage		600	V
I _{T(AV)}	Average on-state current		16	A
I _{TSM}	Surge non-repetitive on-state current	50HZ 60HZ	140 150	A
P _{G(AV)}	Average gate power dissipation (over any 20 ms period)		0.5	W
T _j	Operating junction temperature		-40~125	°C
T _{stg}	Storage temperature		-40~150	°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;	$T_j=125^\circ\text{C}$		0.5	mA
I_{DRM}	Repetitive peak off-state current					
V_{TM}	On-state voltage	$I_T=20\text{A}$			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	
				IV	70	
V_{GT}	Gate-trigger voltage	$V_D=12\text{V}; I_T=0.1\text{A};$			1.5	V

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