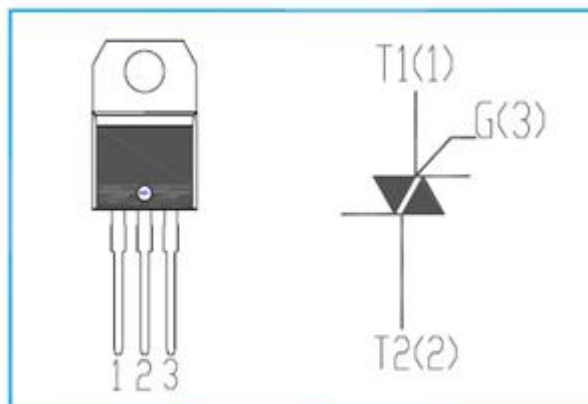


isc Triacs

BT139-600E

FEATURES

- With TO-220 package
- Glass passivated triacs in a plastic envelope, requiring high bidirectional transient and blocking voltage capability and high thermal cycling performance. Typical applications include motor control, industrial and domestic lighting, heating and static switching.

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 off-state voltage	600	V
$I_{\text{T(RMS)}}$	RMS on-state current (full sine wave)	16	A
I_{TSM}	Non-repetitive peak on-state current $t_p=20\text{ms}$	140	A
P_{GM}	Peak gate power dissipation	5	W
$P_{\text{G(AV)}}$	Average gate power dissipation	0.5	W
T_j	Operating junction temperature	125	$^{\circ}\text{C}$
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	$V_R=V_{\text{RRM}}$, $V_R=V_{\text{RRM}}$, $T_j=125^{\circ}\text{C}$		0.02 0.5	mA
I_{DRM}	Repetitive peak off-state current	$V_D=V_{\text{DRM}}$, $V_D=V_{\text{DRM}}$, $T_j=125^{\circ}\text{C}$		0.02 0.5	mA
I_{GT}	Gate trigger current	$V_D=12\text{V}$; $I_T=0.1\text{A}$		10	mA
				10	
				10	
				25	
V_{TM}	On-state voltage	$I_T=20\text{A}$		1.6	V
I_{H}	Holding current	$I_{\text{GT}}=0.1\text{A}$, $V_D=12\text{V}$		30	mA
V_{GT}	Gate trigger voltage	$V_D=12\text{V}$; $I_T=0.1\text{A}$		1.5	V