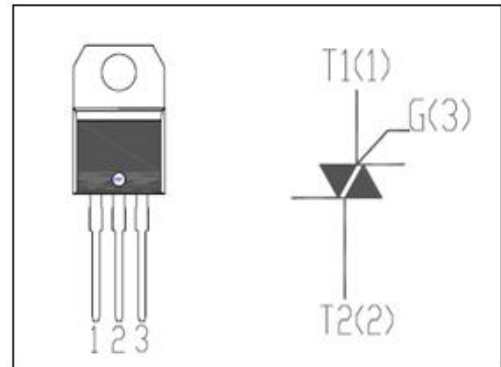


## isc Triacs

## BT139-800E

## FEATURES

- Glass passivated triacs in a plastic envelope, for use in Applications 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.
- 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	800	V
$V_{\text{RRM}}$	Repetitive peak off-state voltage	800	V
$I_{\text{T(RMS)}}$	RMS on-state current (full sine wave)	16	A
$I_{\text{TSM}}$	Non-repetitive peak on-state current $t_p=20\text{ms}$	160	A
$P_{\text{GM}}$	Peak gate power dissipation	5	W
$P_{\text{G(AV)}}$	Average gate power dissipation	0.5	W
$T_j$	Operating junction temperature	110	$^\circ\text{C}$
$T_{\text{stg}}$	Storage temperature	-40~150	$^\circ\text{C}$

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

SYMBOL	PARAMETER		CONDITIONS	MIN	MAX	UNIT
$I_{\text{RRM}}$	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
$I_{\text{DRM}}$	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
$I_{\text{GT}}$	Gate trigger current	I	$V_D=12\text{V}$ ; $I_T=0.1\text{A}$		10	mA
		II			10	
		III			10	
		IV			25	
$V_{\text{TM}}$	On-state voltage		$I_T=20\text{A}$		1.6	V
$I_{\text{H}}$	Holding current		$I_{\text{GT}}=0.1\text{A}$ , $V_D=12\text{V}$		30	mA
$V_{\text{GT}}$	Gate trigger voltage		$V_D=12\text{V}$ ; $I_T=0.1\text{A}$		1.5	V

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