

## isc Thyristors

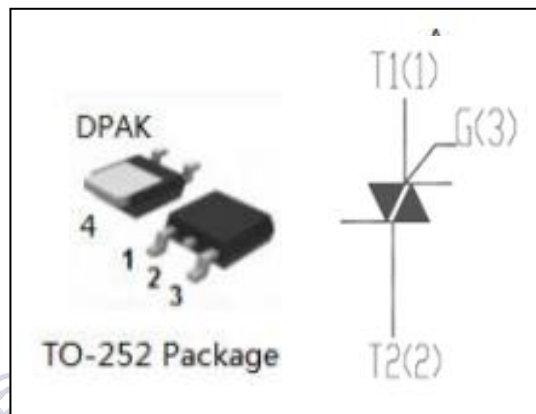
## BT137S-800E

## DESCRIPTION

- With TO-252( DPAK ) packaging
- Operating in 4 quadrants
- High commutation capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

- Switching applications
- Phase control
- Static switching on inductive or resistive load


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

SYMBOL	PARAMETER		MAX	UNIT
$V_{\text{DRM}}$	Repetitive peak off-state voltage		800	V
$V_{\text{RRM}}$	Repetitive peak reverse voltage		800	V
$I_{\text{T(RSM)}}$	Average on-state current		8	A
$I_{\text{TSM}}$	Surge non-repetitive on-state current	50HZ 60HZ	65 71	A
$P_{\text{G(AV)}}$	Average gate power dissipation ( over any 20 ms period )		0.5	W
$T_j$	Operating junction temperature		-40~125	$^{\circ}\text{C}$
$T_{\text{stg}}$	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 <sub>RRM</sub>	Repetitive peak reverse current	V <sub>R</sub> =V <sub>RRM</sub> Rated; V <sub>D</sub> =V <sub>DRM</sub> Rated;	T <sub>j</sub> =125℃		0.5	mA
I <sub>DRM</sub>	Repetitive peak off-state current					
V <sub>TM</sub>	On-state voltage	I <sub>T</sub> =10A			1.65	V
I <sub>GT</sub>	Gate-trigger current	V <sub>D</sub> =12V;I <sub>T</sub> =0.1A;	I		10	mA
			II		10	
			III		10	
			IV		20	
V <sub>GT</sub>	Gate-trigger voltage	V <sub>D</sub> =12V;I <sub>T</sub> =0.1A;			1.5	V
R <sub>th</sub> <sub>(j-mb)</sub>	Junction to mounting base	Half cycle			2.4	℃/W

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