



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

## TO-252-2L Plastic-Encapsulate Thyristors

### BT136S TRIAC

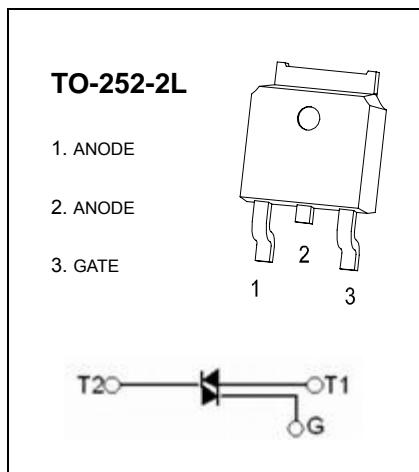
#### MAIN FEATURES

Symbol	value	unit
$I_{T(RMS)}$	6	A
$V_{DRM}/V_{RRM}$	600	V
$I_{TSM}$	25	A

#### GENERAL DESCRIPTION

Glass passivated triacs in a plastic envelope , intended for use in applications requiring high bidirectional transient andblocking voltage capability and high thermal cycling performance.

Typical applications include motor control, industrial and domestic lighting , heating and static switching.



#### ABSOLUTE MAXIMUM RATINGS (Ta=25 °C unless otherwise noted)

symbol	parameter	value	unit
$I_{T(RMS)}$	RMS on-state current (full sine wave)	D <sup>2</sup> PAK/TO-220	$T_C=107^\circ\text{C}$
$I_{TSM}$	Non repetitive surge peak on-state current (full sine wave, $T_j = 25^\circ\text{C}$ )	$t=20\text{ms}$	25
		$t=16.7\text{ms}$	27
$I_{GM}$	Peak gate current	2	A
$P_{G(AV)}$	Average gate power dissipation	$T_j=125^\circ\text{C}$	0.5
$T_{stg}$	Storage junction temperature range	-40 to +150	
$T_j$	Operating junction temperature range	-40 to +125	°C

#### ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Rated repetitive peak off-state/reverse voltage	$V_{DRM}, V_{RRM}$	$I_D=10\mu\text{A}$	600		V
Rated repetitive peak off-state current	$I_{DRM}, I_{RRM}$	$V_D=620\text{V}$		10	$\mu\text{A}$
On-state voltage	$V_{TM}$	$I_T=5\text{A}$		1.7	V
Gate trigger current	I	$I_{GT}$	$T_2(+), G(+)$	$V_D=12\text{V}$	10 mA
	II		$T_2(+), G(-)$		10 mA
	III		$T_2(-), G(-)$		10 mA
	IV		$T_2(-), G(+)$		- mA
Gate trigger voltage	I	$V_{GT}$	$T_2(+), G(+)$	$R_L=100\Omega$	1.45 V
	II		$T_2(+), G(-)$		1.45 V
	III		$T_2(-), G(-)$		1.45 V
	IV		$T_2(-), G(+)$		- V
Holding current	$I_H$	$I_T = 100\text{mA}$ $I_G = 20\text{mA}$		20	mA