

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

### BT136S TRIAC

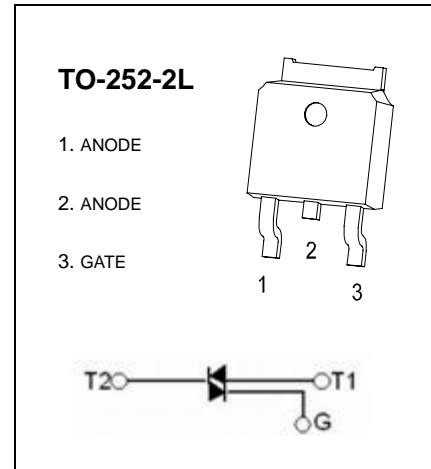
#### MAIN FEATURES

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 and blocking voltage capability and high thermal cycling performance.

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



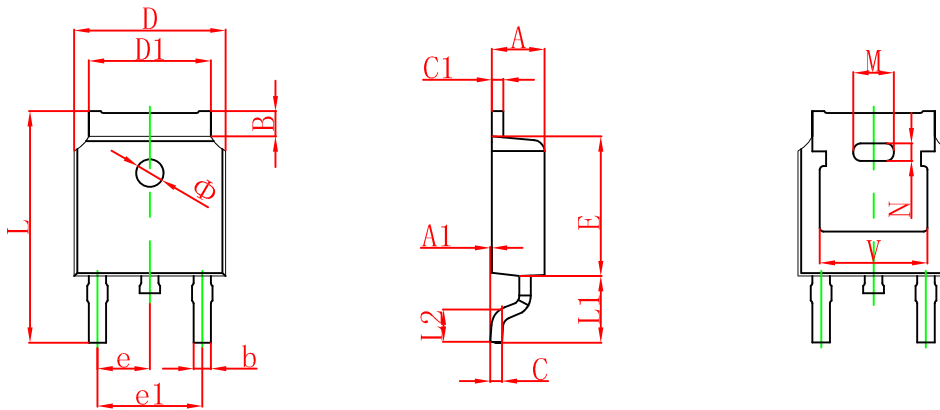
#### ABSOLUTE MAXIMUM RATINGS (Ta=25 unless otherwise noted)

symbol	parameter			value	unit
$I_{T(RMS)}$	RMS on-state current (full sine wave)	D <sup>2</sup> PAK/TO-220	T <sub>C</sub> =107°C	6	A
$I_{TSM}$	Non repetitive surge peak on-state current (full sine wave, T <sub>j</sub> =25°C)		t=20ms	25	A
			t=16.7ms	27	
$I_{GM}$	Peak gate current			2	A
$P_{G(AV)}$	Average gate power dissipation		T <sub>j</sub> =125°C	0.5	W
T <sub>stg</sub>	Storage junction temperature range			-40 to +150	°C
T <sub>j</sub>	Operating junction temperature range			-40 to +125	

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

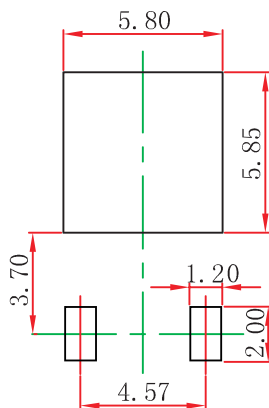
Parameter		Symbol	Test conditions		Min	Max	Unit
Rated repetitive peak off-state/reverse voltage		$V_{DRM}, V_{RRM}$	$I_D=10\mu A$		600		V
Rated repetitive peak off-state current		$I_{DRM}, I_{RRM}$	$V_D=620V$			10	$\mu A$
On-state voltage		$V_{TM}$	$I_T=5A$			1.7	V
Gate trigger current	I	$I_{GT}$	T <sub>2</sub> (+), G(+)	$V_D=12V$ $R_L=100\Omega$		10	mA
	II		T <sub>2</sub> (+), G(-)			10	mA
	III		T <sub>2</sub> (-), G(-)			10	mA
	IV		T <sub>2</sub> (-), G(+)			-	mA
Gate trigger voltage	I	$V_{GT}$	T <sub>2</sub> (+), G(+)	$V_D=12V$ $R_L=100\Omega$		1.45	V
	II		T <sub>2</sub> (+), G(-)			1.45	V
	III		T <sub>2</sub> (-), G(-)			1.45	V
	IV		T <sub>2</sub> (-), G(+)			-	V
Holding current		$I_H$	$I_T=100mA$ $I_G=20mA$			20	mA

## TO-252(4R)-2L Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.380	0.087	0.094
A1	0.000	0.100	0.000	0.004
B	0.800	1.400	0.031	0.055
b	0.710	0.810	0.028	0.032
c	0.460	0.560	0.018	0.022
c1	0.460	0.560	0.018	0.022
D	6.500	6.700	0.256	0.264
D1	5.130	5.460	0.202	0.215
E	6.000	6.200	0.236	0.244
e	2.286 TYP.		0.090 TYP.	
e1	4.327	4.727	0.170	0.186
M	1.778REF.		0.070REF.	
N	0.762REF.		0.018REF.	
L	9.800	10.400	0.386	0.409
L1	2.9REF.		0.114REF.	
L2	1.400	1.700	0.055	0.067
V	4.830 REF.		0.190 REF.	
Φ	1.100	1.300	0.043	0.051

## TO-252(4R)-2L Suggested Pad Layout



### Note:

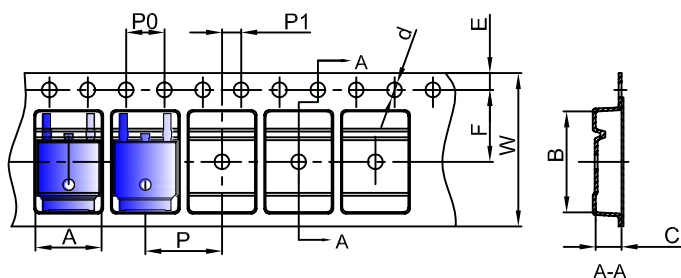
1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.

### NOTICE

JCET reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JCET does not assume any liability arising out of the application or use of any product described herein.

## TO-252 Tape and reel

### TO-252 Embossed Carrier Tape

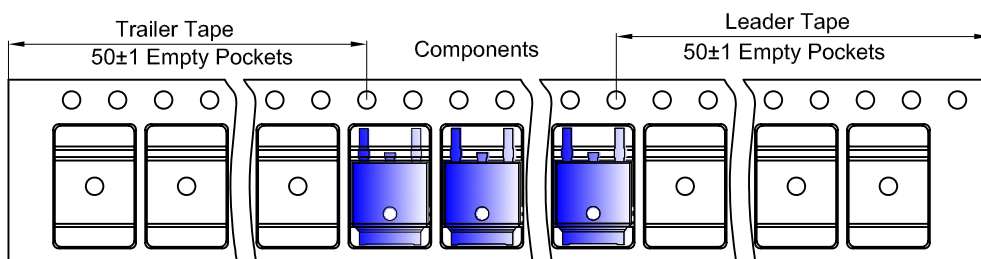


#### Packaging Description:

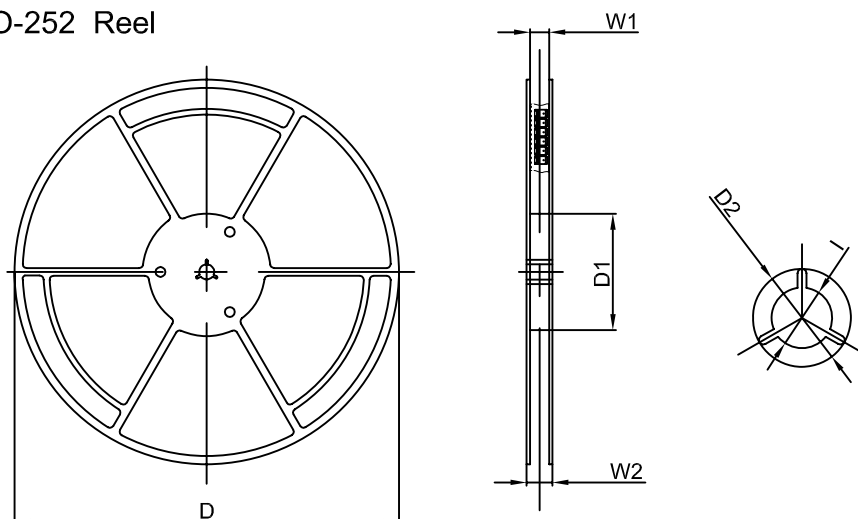
TO-252 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 25,00 units per 13" or 33.0 cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
TO-252	6.90	10.50	2.70	Ø1.55	1.75	7.50	4.00	8.00	2.00	16.00
(Tolerance)	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+0.3/-0.1

### TO-252 Tape Leader and Trailer



### TO-252 Reel



Dimensions are in millimeter						
Reel Option	D	D1	D2	W1	W2	I
13"Dia	330.00	100.00	Ø21.00	16.40	21.00	Ø13.00
Tolerance	+/-2	+/-1	+/-1	+/-1	+/-1	+/-1

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
2,500 pcs	13inch	2,500 pcs	340×336×29	25,000 pcs	353×346×365	14.04