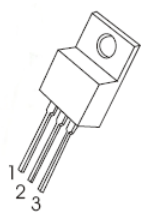
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-220-3L Plastic-Encapsulate Thyristors

BT136 TRIAC

TO-220-3L

1. ANODE
2. ANODE
3. GATE



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.

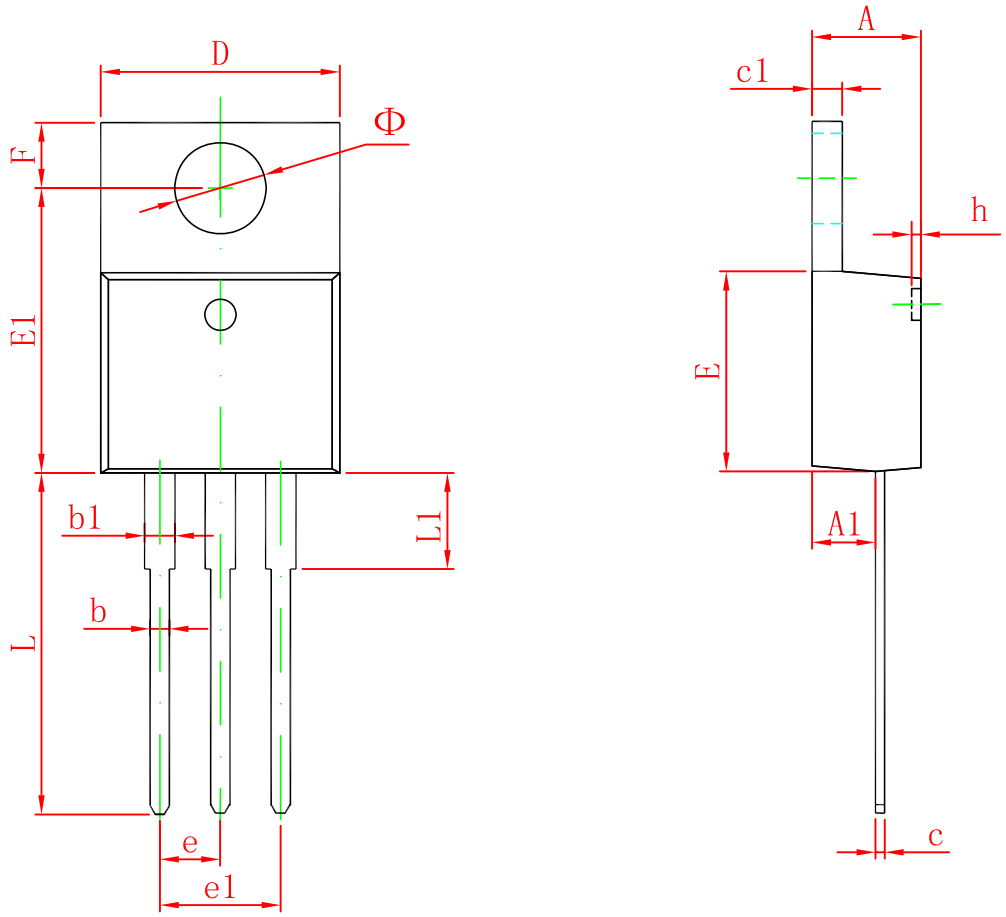
ABSOLUTE MAXIMUM RATINGS (Ta=25℃ unless otherwise noted)

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

ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

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

TO-220-3L Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	4.470	4.670	0.176	0.184
A1	2.520	2.820	0.099	0.111
b	0.710	0.910	0.028	0.036
b1	1.170	1.370	0.046	0.054
c	0.310	0.530	0.012	0.021
c1	1.170	1.370	0.046	0.054
D	10.010	10.310	0.394	0.406
E	8.500	8.900	0.335	0.350
E1	12.060	12.460	0.475	0.491
e	2.540 TYP		0.100 TYP	
e1	4.980	5.180	0.196	0.204
F	2.590	2.890	0.102	0.114
h	0.000	0.300	0.000	0.012
L	13.400	13.800	0.528	0.543
L1	3.560	3.960	0.140	0.156
Φ	3.735	3.935	0.147	0.155