

#### Continental Device India Limited

An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company





BTA06/BTB06 TO-220

**Triac Series** 

## Absolute maximum ratings

Parameter	Symbol	Value	Unit	Test condition
peak repetitive off-stage voltage	$V_{DRM}, V_{RRM}$	600	V	
on-state RMS current	I <sub>T</sub> (RMS)	6	Α	Tc≤105 °C
NON repetitive surge peak on-state current	I <sub>TSM</sub>	60	Α	Tp=20ms, Tj=25 °C, F=50HZ
critical rate of rise on-state current	dl/dt (Q <sub>1-3</sub> )	50	A/μs	
peak gate current	I <sub>GM</sub>	4	Α	
average gate power dissipation	P <sub>G</sub> (AV)	0.5	W	
storage temperature range	Tstg	-40 to +150	°C	
operating junction temperature range	Tj	125	°C	

### Electrical characteristics (Tj=25°C) unless otherwise specified

Parameter	Symbol	Value	Unit	Test condition
gate trigger current	I <sub>GT</sub>	<u>&lt;</u> 50	mA	$T2+G+ V_D=12V, I_T=0.1A$
		<u>&lt;</u> 50	mA	T2+G- $V_D=12V$ , $I_T=0.1A$
		<u>&lt;</u> 50	mA	T2-G- $V_D=12V$ , $I_T=0.1A$
		<u>&lt;</u> 100	mA	T2-G+ $V_D=12V$ , $I_T=0.1A$
gate trigger voltage	V <sub>GT</sub>	<u>&lt;</u> 1.30	V	V <sub>D</sub> =12V, I <sub>T</sub> =0.1A
hold current	I <sub>H</sub>	<u>&lt;</u> 25	mA	I <sub>T</sub> =0.5A
critical rate of rise off-state voltage	dv/dt	<u>&gt;</u> 200	V/µs	V <sub>D</sub> =67%V <sub>DRM</sub>
on-state voltage	$V_{TM}$	<u>&lt;</u> 1.55	V	I <sub>T</sub> =5.5A
off-state leakage current	I <sub>DRM</sub>	<u>≤</u> 1.00	mA	V <sub>D</sub> =V <sub>DRM</sub> ; Tj=125°C
	Rth(j-a)	60		
thermal resistance	Rth(j-c) AC	<u>&lt;</u> 2.70	°C/W	BTA Insulated
	Rth(j-c) AC	<u>&lt;</u> 1.80		BTB Uninsulated

#### Disclaimer

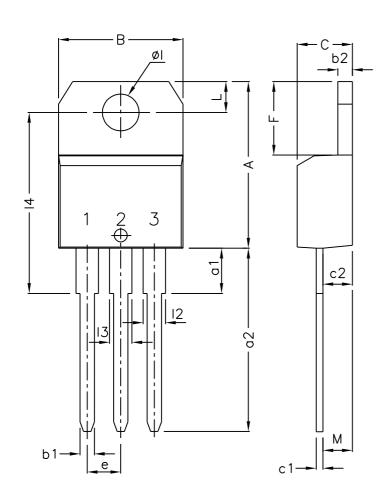
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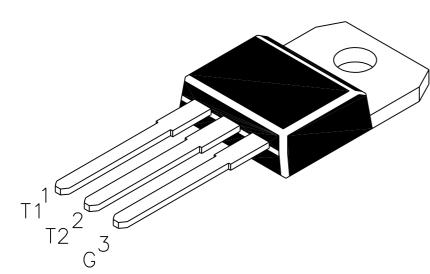
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# PACKAGE TO-220 AB



DIM	MIN	TYP.	MAX
Α	15.20		15.90
a1		3.75	
a2	13.00		14.00
В	10.00		10.40
b1	0.61		0.88
b2	1.23		1.32
С	4.40		4.60
c1	0.49		0.70
c2	2.40		2.72
е	2.40		2.70
F	6.20		6.60
	3.75		3.85
14	15.80	16.40	16.80
L	2.65		2.95
12	1.14		1.70
13	1.14		1.70
М		2.60	

ALL DIMENSIONS ARE IN mm



# PIN CONFIGURATION:-

- 1. MAIN TERMINAL 1
- 2. MAIN TERMINAL 2
- 3. GATE

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