

Continental Device India Limited

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





TO-220

BTA24 / BTB24 Triac Series

Absolute maximum ratings (Tamb=25°C)

Parameter		Symbol	Value	Unit	Test condition
peak repetitive off-stage voltage	BTA/BTB-600	V_{DRM}, V_{RRM}	600	V	I _D =0.1mA, I _R =0.1mA
peak repetitive off-stage voltage	BTA/BTB-800	V_{DRM}, V_{RRM}	800	V	I _D =0.1mA, I _R =0.1mA
on-state RMS current		I _T (RMS)	25	Α	all conduction angles
NON repetitive surge peak on-state current		I _{TSM}	250	Α	Tp=10ms, T _j =25 °C
critical rate of rise on-state current		dl/dt	50	A/μs	I _{TM} =20A, I _G =50mA
peak gate current		I _{GM}	4	Α	tp=20μs
average gate power dissipation		P _G (AV)	1	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 _{GT}	<u><</u> 50	mA	T2+G+ V_D =12V, I_T =0.1A
		<u><</u> 50	mA	T2+G- V _D =12V, I _T =0.1A
		<u><</u> 50	mA	T2-G- V _D =12V, I _T =0.1A
		<u><</u> 100	mA	T2-G+ V_D =12V, I_T =0.1A
gate trigger voltage	V_{GT}	<u><</u> 1.3	V	V _D =12V, I _T =0.1A
hold current	I _H	<u><</u> 50	mA	V _D =12V, I _T =0.1A
critical rate of rise off-state voltage	dv/dt	<u>></u> 200	V/μs	V _D =67%V _{DRM}
on-state voltage	V_{TM}	<u><</u> 1.55	V	I _T =35A
off-state leakage current	I _{DRM}	<u><</u> 3.0	mA	$V_D=V_{DRM}, V_R=V_{RRM}; T_j=125^{\circ}C$
	$R_{th(j-a)}$	60		
thermal resistance	$R_{th(j-c)}$	1.7	°C/W	BTA
	$R_{th(j-c)}$	0.8		BTB

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in you product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionalit parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDI however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out c the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed f use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated i their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damage resulting from such sale(s).

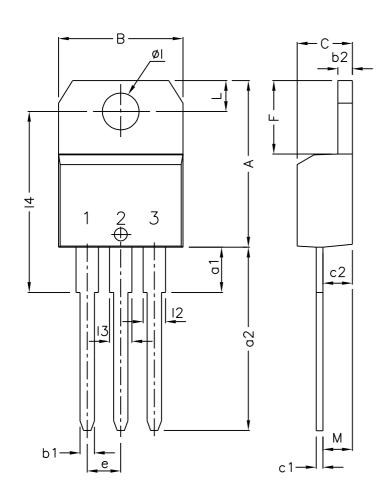
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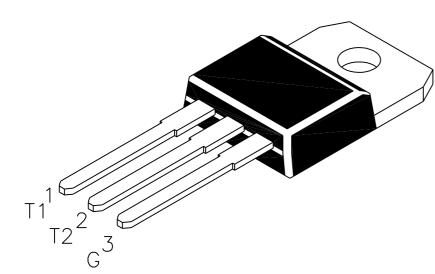
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PACKAGE TO-220 AB



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