

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





BTA20/BTB20 TO-220

Triac Series

Absolute maximum ratings

Parameter	Symbol	Value	Unit	Test condition
peak repetitive off-stage voltage	V _{DRM} , V _{RRM}	600	V	I _D =0.1mA, I _R =0.1mA
on-state RMS current	I _T (RMS)	20	А	all conduction angles
NON repetitive surge peak on-state current	I _{TSM}	200	Α	Tp=10ms, Tj=25 °C
critical rate of rise on-state current	dl/dt	20	A/μs	I _{TM} =20A, I _G =50mA
peak gate current	I _{GM}	4	А	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> 1.7	٧	I _T =28A
off-state leakage current	I _{DRM}	<u>≤</u> 3.0	mA	V _D =V _{DRM} ; Tj=125°C
	Rth(j-a)	60		
thermal resistance	Rth(j-c) AC	<u><</u> 2.0	°C/W	BTA Insulated
	Rth(j-c) AC	<u><</u> 1.7		BTB Uninsulated

Disclaimer

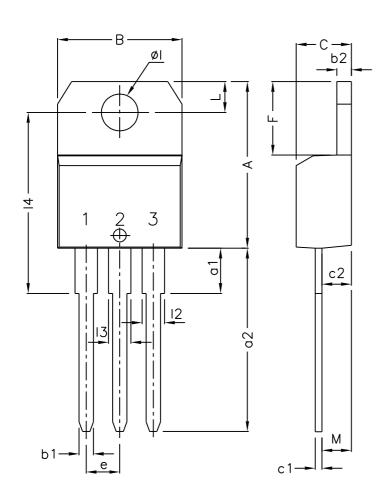
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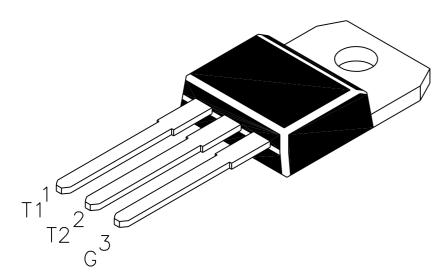
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PACKAGE TO-220 AB



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