

### Continental Device India Limited

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





BT136 TO-220

#### **Triac Series**

Absolute maximum ratings

BT136 Rev\_1 011209E

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)	4	Α	TL <u>&lt;</u> 66°C
NON repetitive surge peak on-state current	I <sub>TSM</sub>	25	А	Tp=20ms, Tj=25 °C
critical rate of rise on-state current	dl/dt (Q <sub>1-3</sub> )	50	A/μs	I <sub>TM</sub> =20A, T <sub>G</sub> =0.2A
peak gate current	I <sub>GM</sub>	2	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> 10	mA	$T2+G+ V_D=12V, I_T=0.1A$
		<u>&lt;</u> 10	mA	T2+G- $V_D=12V$ , $I_T=0.1A$
		<u>&lt;</u> 10	mA	T2-G- $V_D$ =12V, $I_T$ =0.1A
		<u>&lt;</u> 25	mA	T2-G+ $V_D=12V$ , $I_T=0.1A$
gate trigger voltage	$V_{GT}$	<u>&lt;</u> 1.5	V	V <sub>D</sub> =12V, I <sub>T</sub> =0.1A
hold current	I <sub>H</sub>	<u>≤</u> 30	mA	V <sub>D</sub> =12V, I <sub>T</sub> =0.1A
critical rate of rise off-state voltage	dv/dt	<u>≥</u> 50	V/μs	$V_D=67\%V_{DRM}$
on-state voltage	$V_{TM}$	<u>≤</u> 1.7	V	I <sub>T</sub> =5A
off-state leakage current	I <sub>DRM</sub>	<u>&lt;</u> 0.5	mA	V <sub>D</sub> =V <sub>DRM</sub> ; Tj=125°C
thermal resistance	Rth(j-a)	60	°C/W	
	Rth(j-c)	<u>&lt;</u> 3.7		

#### Disclaimer

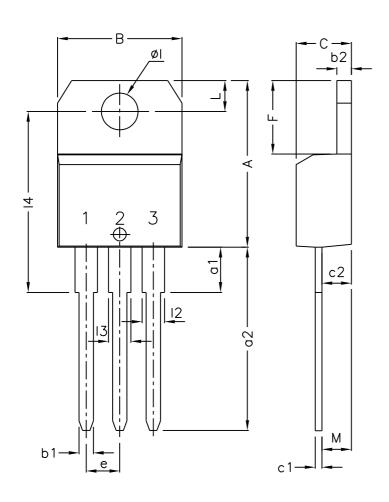
The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in you product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality 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. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out o 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 for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in 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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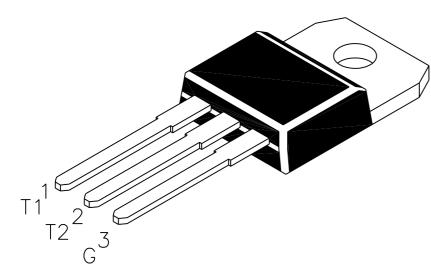
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# PACKAGE TO-220 AB



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