

## Continental Device India Limited

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





BTA41 TOP 3

## **Triac Series**

Absolute maximum ratings

Parameter	Symbol	Value	Unit	Test condition
peak repetitive off-stage voltage	$V_{DRM}, V_{RRM}$			
BTA41-600		600	V	I <sub>D</sub> =0.1mA, I <sub>R</sub> =0.1mA
BTA41-800		800	V	I <sub>D</sub> =0.1mA, I <sub>R</sub> =0.1mA
on-state RMS current	I <sub>T</sub> (RMS)	40	А	all conduction angles
NON repetitive surge peak on-state current	I <sub>TSM</sub>	400	А	Tp=10ms, Tj=25 °C
critical rate of rise on-state current	dl/dt	50	A/μs	I <sub>TM</sub> =20A, I <sub>G</sub> =50mA
peak gate current	I <sub>GM</sub>	8	А	tp=20μs
average gate power dissipation	P <sub>G</sub> (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 <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	$V_{GT}$	<u>&lt;</u> 1.30	V	V <sub>D</sub> =12V, I <sub>T</sub> =0.1A
hold current	l <sub>Η</sub>	<u>&lt;</u> 50	mA	V <sub>D</sub> =12V, I <sub>T</sub> =0.1A
critical rate of rise off-state voltage	dv/dt	<u>&gt;</u> 200	V/μs	$V_D=67\%V_{DRM}$
on-state voltage	$V_{TM}$	<u>&lt;</u> 1.55	V	I <sub>T</sub> =60A
off-state leakage current	I <sub>DRM</sub>	<u>&lt;</u> 3.00	mA	$V_D=V_{DRM}; T_j=125^{\circ}C$
thermal resistance	R <sub>th (j-a)</sub>	50	°C/W	
	R <sub>th (j-c)</sub>	<u>&lt;</u> 0.60		

#### Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your 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 of 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

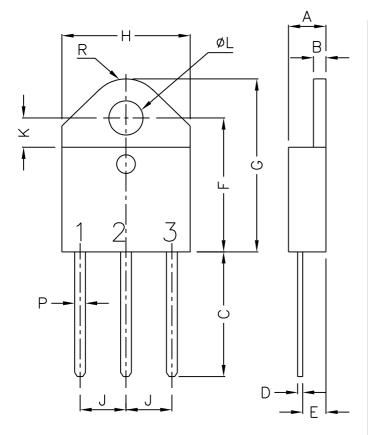
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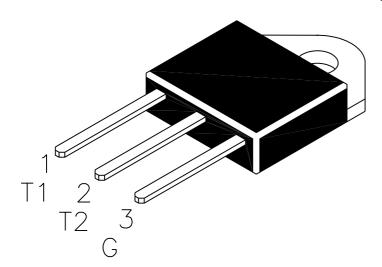
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# PACKAGE TO-P3



DIM	MIN	TYP.	MAX
Α	4.40		4.60
В	1.45		1.55
С	14.35		15.60
D	0.50		0.70
E	2.70		2.90
F	15.80		16.50
G	20.40		21.10
Н	15.10		15.50
J	5.40		5.65
K	3.40		3.65
L	4.08		4.17
Р	1.20		1.40
R		4.60	

ALL DIMENSIONS ARE IN mm



# PIN CONFIGURATION

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