BTA41

Triac Series

TOP 3

Absolute maximum ratings

Parameter	Symbol	Value	Unit	Test condition
peak repetitive off-stage voltage	V_{DRM}, V_{RRM}			
BTA41-600		600	V	I_D=0.1mA, I_R=0.1mA
BTA41-800		800	V	I_D=0.1mA, I_R=0.1mA
on-state RMS current	I_T(RMS)	40	A	all conduction angles
NON repetitive surge peak on-state current	I_{TSM}	400	A	Tp=10ms, Tj=25 ºC
critical rate of rise on-state current	dI/dt	50	A/µs	I_{TM}=20A, I_G=50mA
peak gate current	I_{GM}	8	A	tp=20µs
average gate power dissipation	P_G(AV)	1	W	
storage temperature range	Tstg	-40 to +150	^oC	
operating junction temperature range	Tj	125	^oC	

Electrical characteristics (Tj=25ºC) unless otherwise specified

Parameter	Symbol	Value	Unit	Test condition
gate trigger current	I_{GT}	≤50	mA	T2+G+ V_D=12V, I_T=0.1A
		≤50	mA	T2+G- V_D=12V, I_T=0.1A
		≤50	mA	T2-G- V_D=12V, I_T=0.1A
		≤100	mA	T2-G+ V_D=12V, I_T=0.1A
gate trigger voltage	V_{GT}	≤1.30	V	V_D=12V, I_T=0.1A
hold current	I_H	≤50	mA	V_D=12V, I_T=0.1A
critical rate of rise off-state voltage	dv/dt	≥200	V/µs	V_D=67%V_{DRM}
on-state voltage	V_{TM}	≤1.55	V	I_T=60A
off-state leakage current	I_{DRM}	≤3.00	mA	V_D=V_{DRM}; T_j=125^oC
thermal resistance	$R_{th\ (j-a)}$	50	^oC/W	
	$R_{th\ (j-c)}$	≤0.60		

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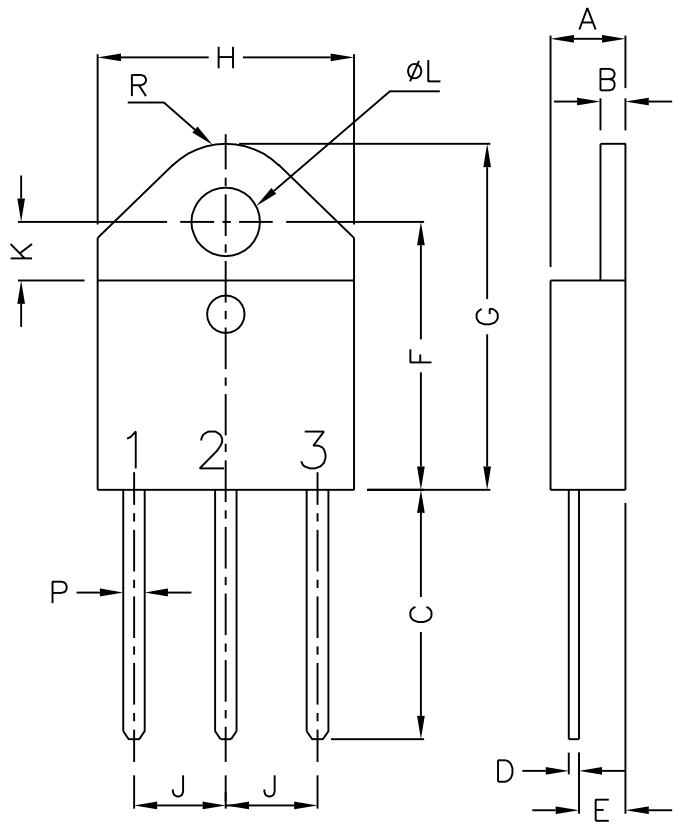
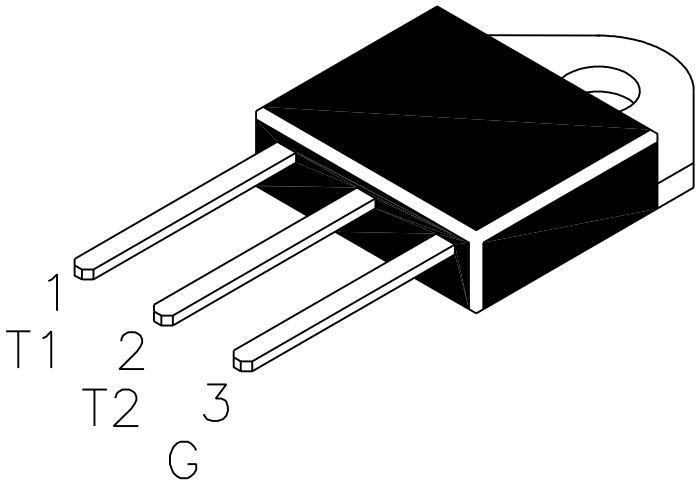
PACKAGE TO-P3



DIM	MIN	TYP.	MAX
A	4.40		4.60
B	1.45		1.55
C	14.35		15.60
D	0.50		0.70
E	2.70		2.90
F	15.80		16.50
G	20.40		21.10
H	15.10		15.50
J	5.40		5.65
K	3.40		3.65
L	4.08		4.17
P	1.20		1.40
R		4.60	

ALL DIMENSIONS ARE IN mm



PIN CONFIGURATION

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