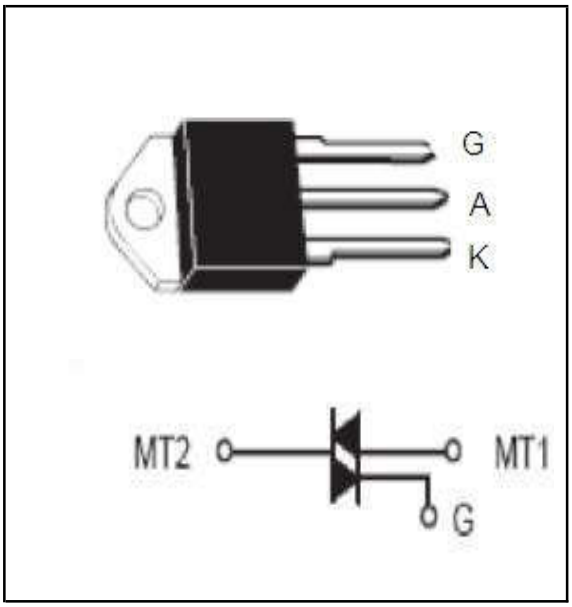
迈诺斯科技

BTA41-600B

4 Quadrants TRIAC

Features

① IT(RMS): 40A
② VGT: 1.5V
③ VDRM VRRM: 600/800/1000



Applications

Washing machine,vacuums, massager,solid state relay， AC Motor speed regulation and so on.

Absolute Maximum Ratings

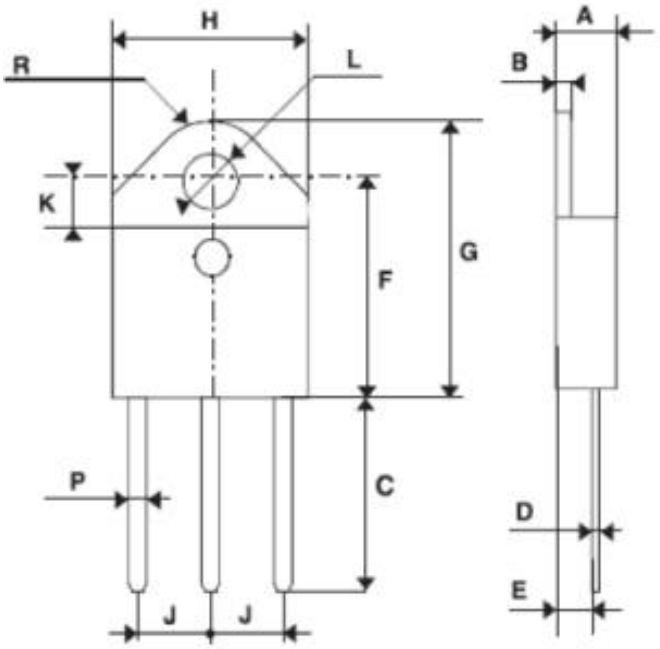
(Tj=25°C unless otherwise specifed)

Symbol	parameter	Conditions	Ratings	Unit
VDRM VRRM	Repetitive Peak Off- State Voltage	BTA41-600	600	V
		BTA41-800	800	V
		BTA41-1000	1000	V
IT(RMS)	R.M.S On-State Current	Tc=110°C	40	A
ITSM	Surge On-State Current	f=50/60Hz tp=16.7ms/20ms	400/420	A
I^2t	I^2t for fusing	Tp=10ms	800	A^2s
PG(AV)	Average Gate Power Dissipation	Tj=125°C	1	W
IGM	Peak Gate Current	Tj=125°C	8	A
Tj	Operating Junction Temperature		-40~125	°C
TSTG	Storage Temperature		-40~150	°C

Electrical Characteristics(Tj=25°C unless otherwise specifed)

symbol	parameter		Test Conditions	Value	Unit
IDRM	Repetitive Peak Off-State Current		Tc=25 °C	5	uA
			Tc=125 °C	5	mA
IRRM	Repetitive Peak Reverse Current		Tc=25 °C	5	uA
			Tc=125 °C	5	mA
VTM	Forward "on" voltage		IT=60A, tp=380us	1.55	V
VGT	Gate trigger voltage		VD=12V ,RL=30Ω	≤1.5	V
di/dt	Critical rate of rise of on-state current	I,II,III	F=120Hz,Tj=125°C , IG=2xIGT,tr≤100ns	≥ 20	A/ms
		IV			
IGT	Gate trigger current	I,II,III	VD=12V, RL=30Ω	≤50	mA
		IV			
IH	Holding current		IT=0.2A	≤80	mA
VDG	Gate non-trigger voltage	ALL	VD=VDRM, TJ=125°C	≥0.2	V
dv/dt	Critical-rate of rise of commutation voltage		TJ=125° C , VD=2/3VDRM ,Gate open circuit	≥800	V/us
Rth(j-c)	Thermal resistance		Junction to case	0.9	°C/W
Rth(j-a)	Thermal resistance		Junction to ambient	50	°C/W

PACKAGE MECHANICAL DATA



REF.	DIMENSIONS					
	Unit: mm			Unit: Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.4		4.6	0.173		0.181
B	1.45		1.55	0.057		0.061
C	14.35		15.60	0.565		0.614
D	0.5		0.7	0.020		0.028
E	2.7		2.9	0.106		0.114
F	15.8		16.5	0.622		0.650
G	20.4		21.1	0.815		0.831
H	15.1		15.5	0.594		0.610
J	5.4		5.65	0.213		0.222
K	3.4		3.65	0.134		0.144
L	4.08		4.17	0.161		0.164
P	1.20		1.40	0.047		0.055
R		4.60			0.181	

TO-3P Package Dimension

NOTE:

1. Exceeding the maximum ratings of the device in performance may cause damage to the device, even the permanent failure, which may affect the dependability of the machine. Please do not exceed the absolute maximum ratings of the device when circuit designing.
2. When installing the heat sink, please pay attention to the torsional moment and the smoothness of the heat sink.
3. MOSFETs is the device which is sensitive to the static electricity, it is necessary to protect the device from being damaged by the static electricity when using it.
4. Shenzhen Minos reserves the right to make changes in this specification sheet and is subject to change withoutprior notice.

CONTACT:

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