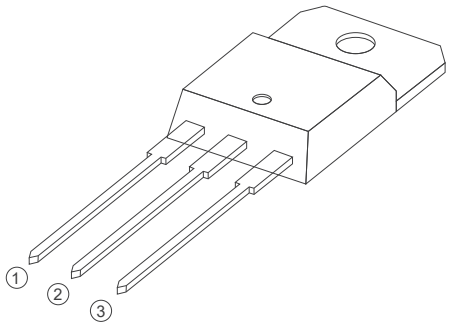
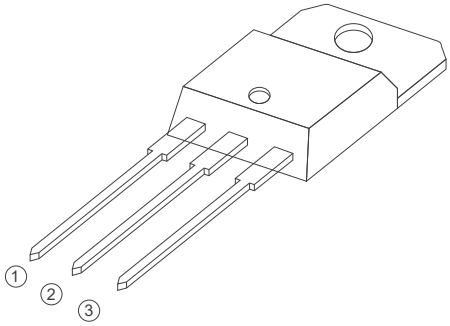
BTA/BTB26 Series
25A TRIACs
3 Quadrants
4 Quadrants

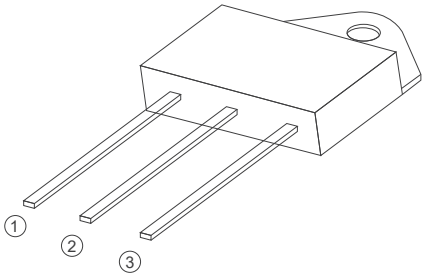
ShenZhenHanKingyuan
Electronic CO.,Ltd



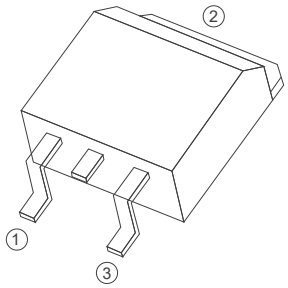
TO-220A Insulated



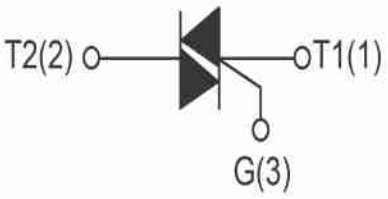
TO-220B Non-Insulated



TO-3P Insulated



TO-263



FEATURES

› IT(RMS): 25A › VGT: 1.5V › VDRM VRRM:800Vand1000V

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	BTA26-800	800	V
		BTA26-1000	1000	V
IT(RMS)	R.M.S On-State Current	Tc=110°C	25	A
ITSM	Surge On-State Current	tp=16.7ms/tp=10ms	280/300	A
I²t	I²t for fusing	Tp=10ms	520	A²s
PG(AV)	Average Gate Power Dissipation	Tj=125°C	1	W
IGM	Peak Gate Current	Tj=125°C	6	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
				CW	BW	B	
IDRM	Repetitive Peak Off-State Current		Tj=25°C	5			uA
			Tj=125°C	3			mA
IRRM	Repetitive Peak Reverse Current		Tj=25°C	5			uA
			Tj=125°C	3			mA
VTM	Forward "on" voltage		IT=35A 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	≥50			A/us
		IV		≥10			A/us
IGT	Gate trigger current	I,II,III	VD=12V RL=30Ω	≤35	≤50	≤50	mA
		IV		/	/	≤100	mA
IH	Holding current		IT=0.2A	≤60	≤80	≤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	≥400	≥1000	≥500	V/us
Rth(j-c)	Thermal resistance		Junction to case	1.1			°C/W
Rth(j-a)	Thermal resistance		Junction to ambient	50			°C/W

FIG1

Maximum power dissipation versus RMS on-state current

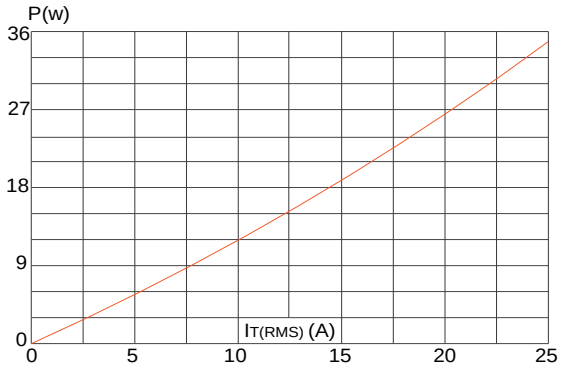


FIG2

RMS on-state current versus case temperature

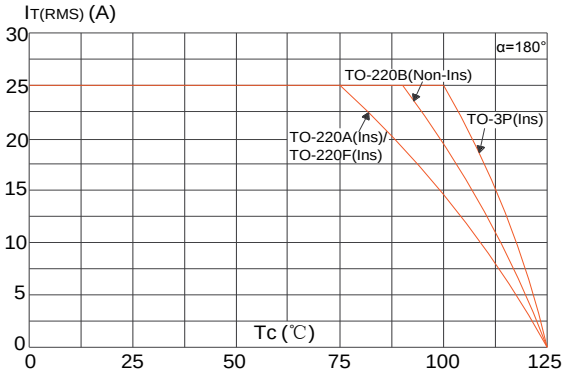


FIG3

Surge peak on-state current versus number of cycles

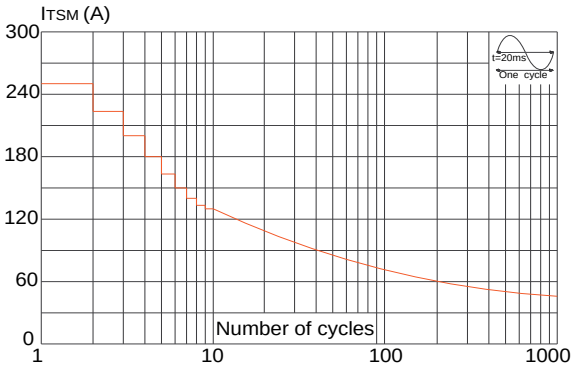


FIG4

On-state characteristics (maximum values)

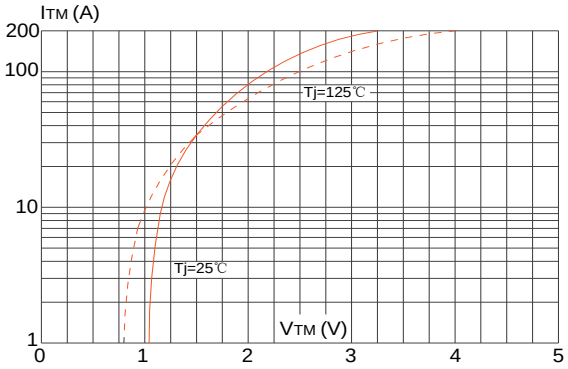


FIG5

Non-repetitive surge peak on-state current for a sinusoidal pulse with width tp<20ms, and corresponging value of I^2t (dI/dt < 100A/μs)

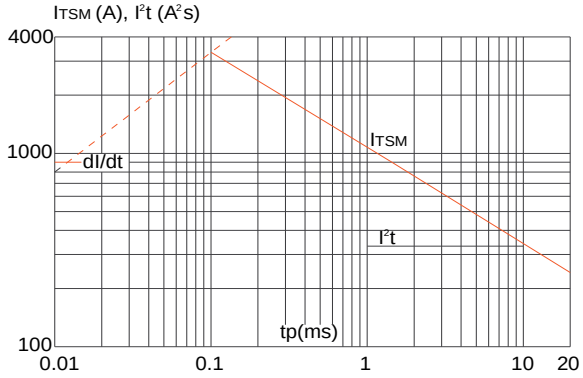
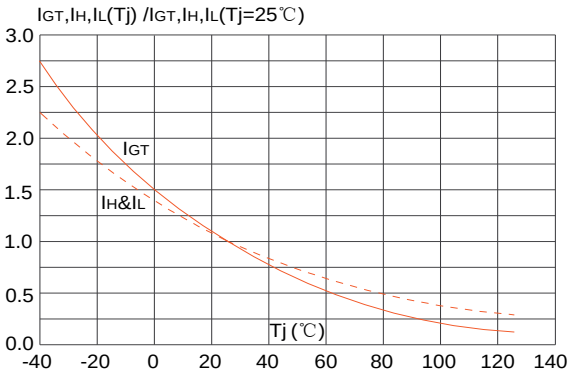
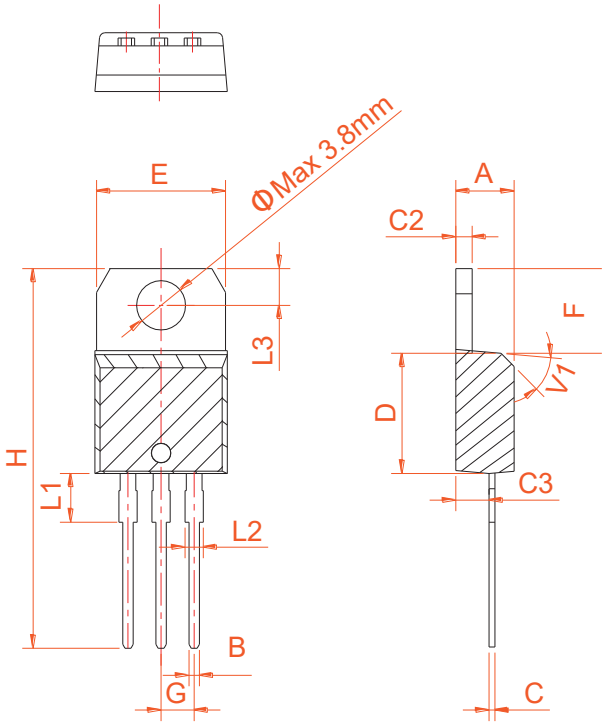


FIG6

FIG.6: Relative variations of gate trigger current, holding current and latching current versus junction temperature



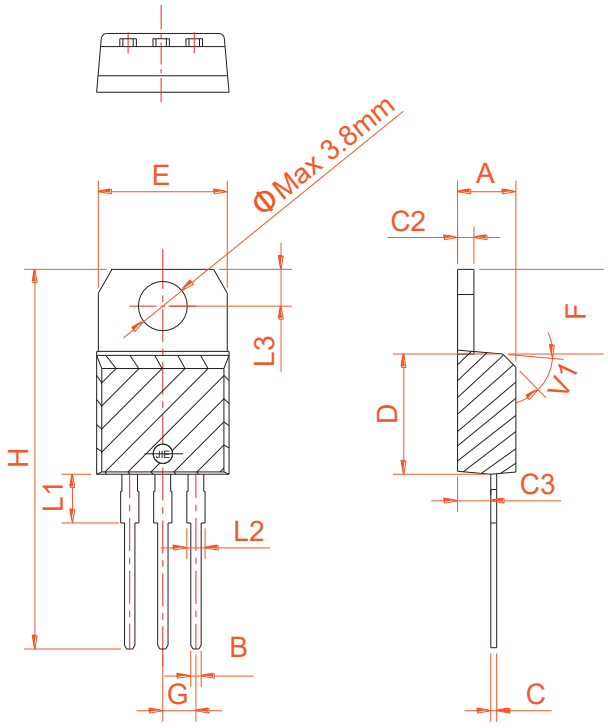
PACKAGE MECHANICAL DATA



TO-220A Ins

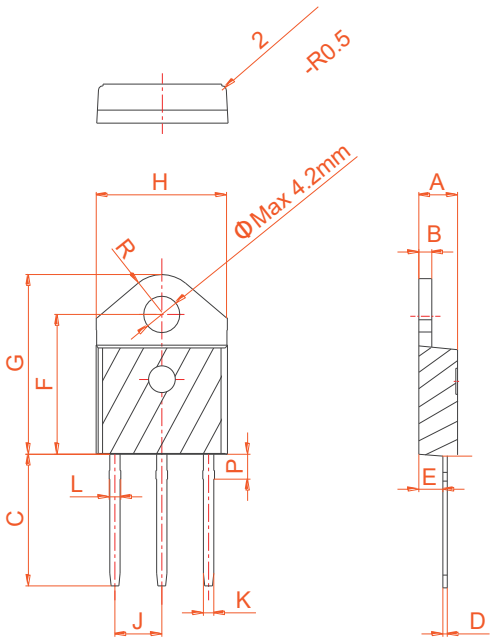
Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.40		4.60	0.173		0.181
B	0.61		0.88	0.024		0.035
C	0.46		0.70	0.018		0.028
C2	1.21		1.32	0.048		0.052
C3	2.40		2.72	0.094		0.107
D	8.60		9.70	0.339		0.382
E	9.80		10.4	0.386		0.409
F	6.55		6.95	0.258		0.274
G		2.54			0.1	
H	28.0		29.8	1.102		1.173
L1		3.75			0.148	
L2	1.14		1.70	0.045		0.067
L3	2.65		2.95	0.104		0.116
V1		45°			45°	

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.40		4.60	0.173		0.181
B	0.61		0.88	0.024		0.035
C	0.46		0.70	0.018		0.028
C2	1.21		1.32	0.048		0.052
C3	2.40		2.72	0.094		0.107
D	8.60		9.70	0.339		0.382
E	9.60		10.4	0.378		0.409
F	6.20		6.60	0.244		0.260
G		2.54			0.1	
H	28.0		29.8	1.102		1.173
L1		3.75			0.148	
L2	1.14		1.70	0.045		0.067
L3	2.65		2.95	0.104		0.116
V1		45°			45°	



TO-220B Non-Ins

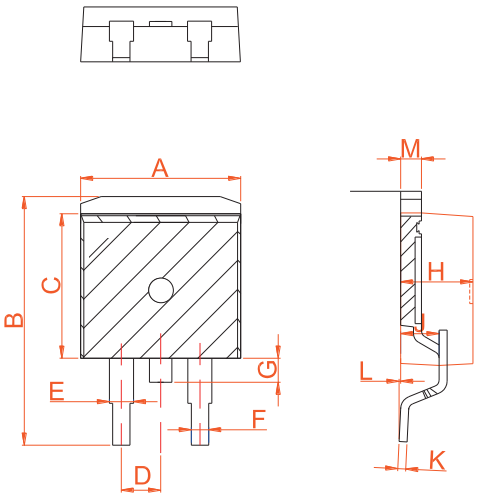
PACKAGE MECHANICAL DATA



TO-3P Ins

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.40		4.60	0.173		0.181
B	1.45		1.55	0.057		0.061
C	14.35		15.60	0.565		0.614
D	0.50		0.70	0.020		0.028
E	2.70		2.90	0.106		0.114
F	15.80		16.50	0.622		0.650
G	20.40		21.10	0.803		0.831
H	15.10		15.50	0.594		0.610
J	5.40		5.65	0.213		0.222
K	1.10		1.40	0.043		0.055
L	1.35		1.50	0.053		0.059
P	2.80		3.00	0.110		0.118
R		4.35			0.171	

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	9.90		10.20	0.390		0.402
B	14.70		15.80	0.579		0.622
C	9.4		9.6	0.37		0.378
D		2.54			0.100	
E	1.20		1.40	0.047		0.055
F	0.75		0.85	0.029		0.033
G			1.75			0.069
H	4.40		4.70	0.173		0.185
J	2.30		2.70	0.091		0.106
K	0.38		0.55	0.015		0.022
L	0	0.10	0.25	0	0.004	0.010
M	1.25		1.35	0.049		0.053



TO-263

ShenZhenHanKingyuan
Electronic CO.,Ltd

Information furnished is believed to be accurate and reliable.However,Shenzhen HanKingyuan Electronic assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use.Specifications mentioned in this publication are subject to change without notice.This publication supersedes and replaces all information previously supplied.
The KY logo is a registered trademark of Shenzhen HanKingyuan Electronic。
©2013 Shenzhen HanKingyuan Electronic - Printed in Shenzhen -All Rights Reserved