

IT(RMS)		25A
VDRM/VRRM	BTB26-800	800V
	BTB26-1000	1000V
VTM		1.55V

FEATURES

IT(RMS): 25A

VGT: 1.5V

VDRM VRRM:800V-1000V

Medium current Triac

APPLICATIONS

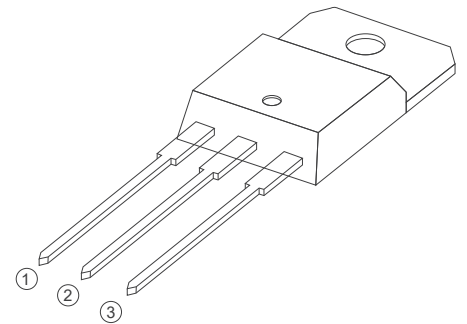
Heater Control

Motor Speed Controller

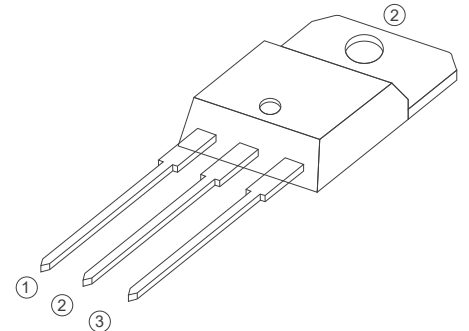
Washing machine

Vacuums

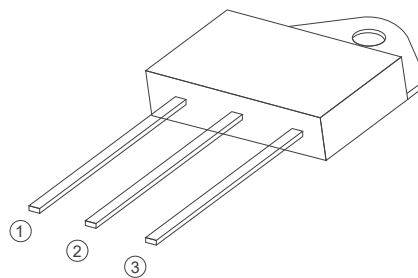
Solid state relay



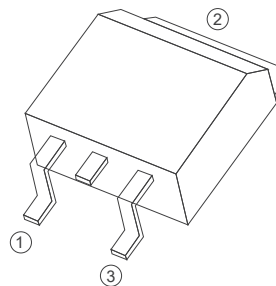
TO-220A Insulated



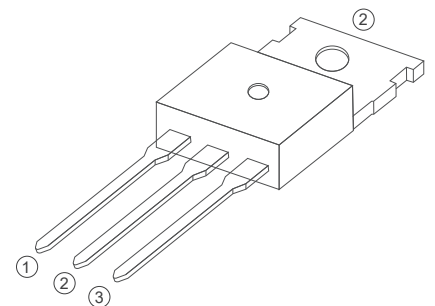
TO-220B Non-Insulated



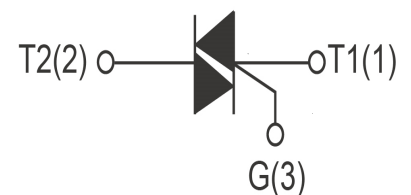
TO-3P Insulated



TO-263



TO-220C



Absolute Maximum Ratings ($T_J=25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Parameter	Conditions	Ratings	Unit
VDRM VRRM	Repetitive Peak Off-State Voltage		800~1000	V
IT(RMS)	R.M.S On-State Current	$T_c=110^{\circ}\text{C}$	25	A
ITSM	Surge On-State Current	$t_p=16.7\text{ms}/t_p=10\text{ms}$	280/300	A
I^2t	I^2t for fusing	$T_p=10\text{ms}$	520	A^2s
PG(AV)	Average Gate Power Dissipation	$T_J=150^{\circ}\text{C}$	1	W
IGM	Peak Gate Current	$T_J=150^{\circ}\text{C}$	6	A
T_J	Operating Junction Temperature		$\sim 40\sim 150$	$^{\circ}\text{C}$
TSTG	Storage Temperature		$\sim 40\sim 150$	$^{\circ}\text{C}$

Electrical Characteristics ($T_J=25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Value			Unit
			CW	BW	B	
IDRM	Repetitive Peak Off-State Current	$T_J=25^{\circ}\text{C}$	5			μA
		$T_J=150^{\circ}\text{C}$	3			mA
IRRM	Repetitive Peak Reverse Current	$T_J=25^{\circ}\text{C}$	5			μA
		$T_J=150^{\circ}\text{C}$	3			mA
VTM	Forward "on" voltage	$I_T=35\text{A}$ $t_p=380\mu\text{s}$	1.55			V
VGT	Gate trigger voltage	$V_D=12\text{V}$, $R_L=30\Omega$	≤ 1.5			V
di/dt	Critical rate of rise of on-state current	I, II, III F=120Hz, $T_J=150^{\circ}\text{C}$ IG=2xIGT, $t_r\leq 100\text{ns}$	≥ 50			A/ μs
			≥ 10			A/ μs
IGT	Gate trigger current	I, II, III VD=12V $R_L=30\Omega$	≤ 35	≤ 50	≤ 50	mA
			/	/	≤ 100	mA
IH	Holding current	$I_T=0.2\text{A}$	≤ 60	≤ 80	≤ 80	mA
VDG	Gate non-trigger voltage	ALL $V_D=V_{DRM}$ $T_J=150^{\circ}\text{C}$	≥ 0.2			V
dv/dt	Critical-rate of rise of commutation voltage	$T_J=150^{\circ}\text{C}$ $V_D=2/3V_{DRM}$ Gate	≥ 400	≥ 1000	≥ 500	V/ μs
Rth(j-c)	Thermal resistance	Junction to case	1.1			$^{\circ}\text{C}/\text{W}$
Rth(j-a)	Thermal resistance	Junction to ambient	50			$^{\circ}\text{C}/\text{W}$

FIG1

Maximum power dissipation versus RMS on-state current

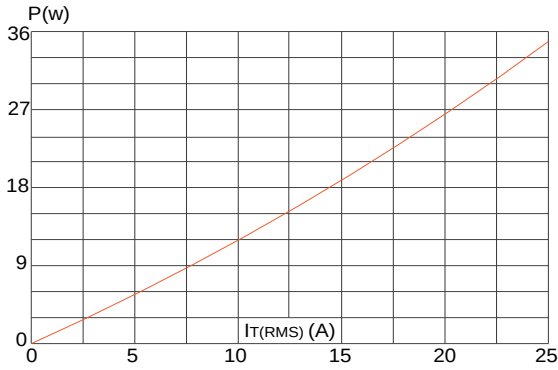


FIG2

RMS on-state current versus case temperature

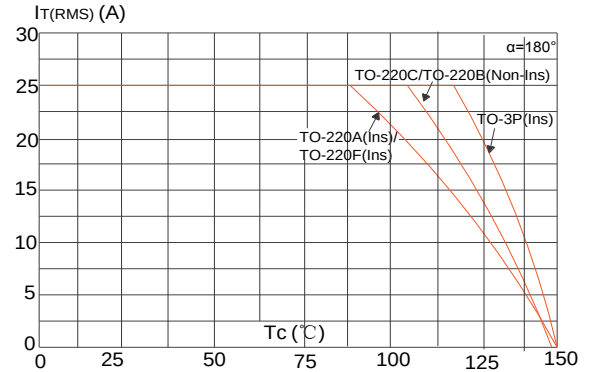


FIG3

Surge peak on-state current versus number of cycles

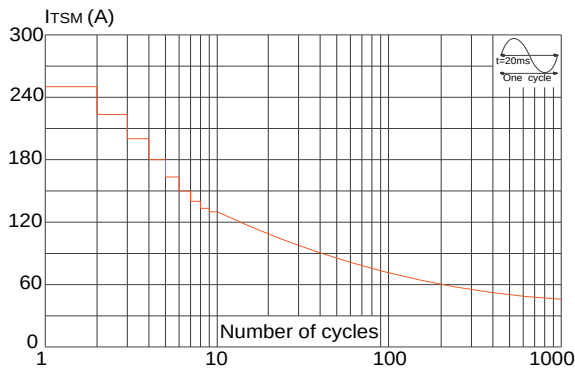


FIG4

On-state characteristics (maximum values)

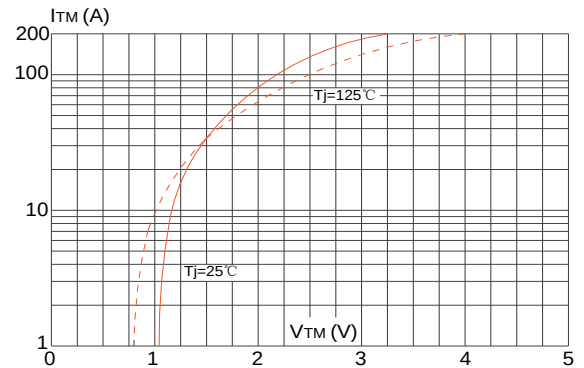


FIG5

Non-repetitive surge peak on-state current for a sinusoidal pulse with width $t_p < 20\text{ms}$, and corresponding value of I^2t ($di/dt < 100\text{A}/\mu\text{s}$)

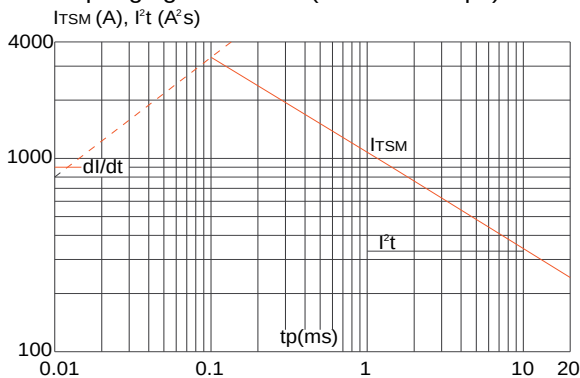
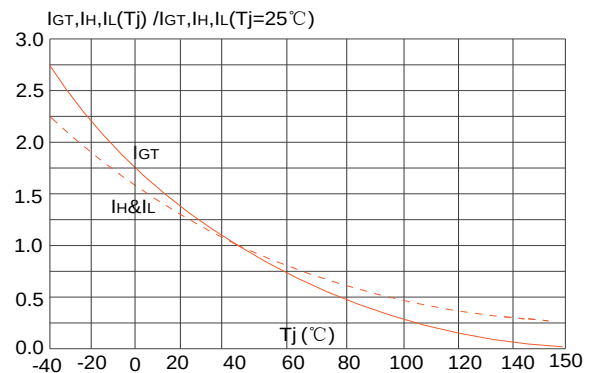
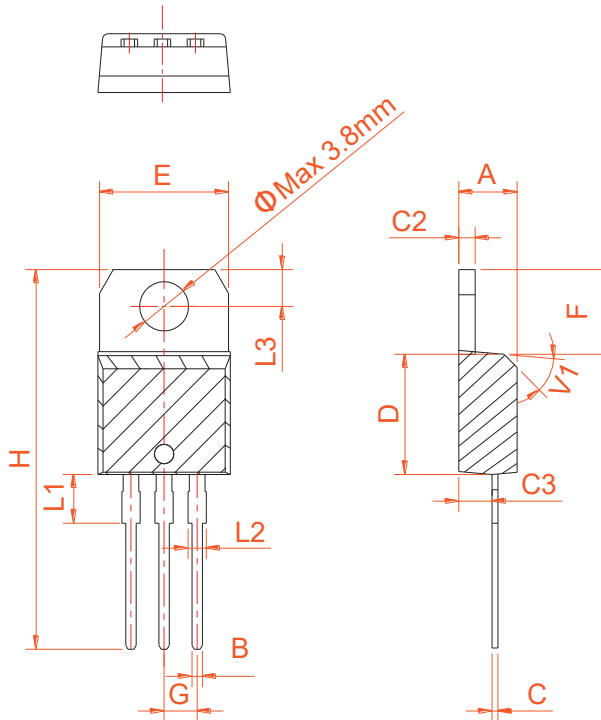


FIG6

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

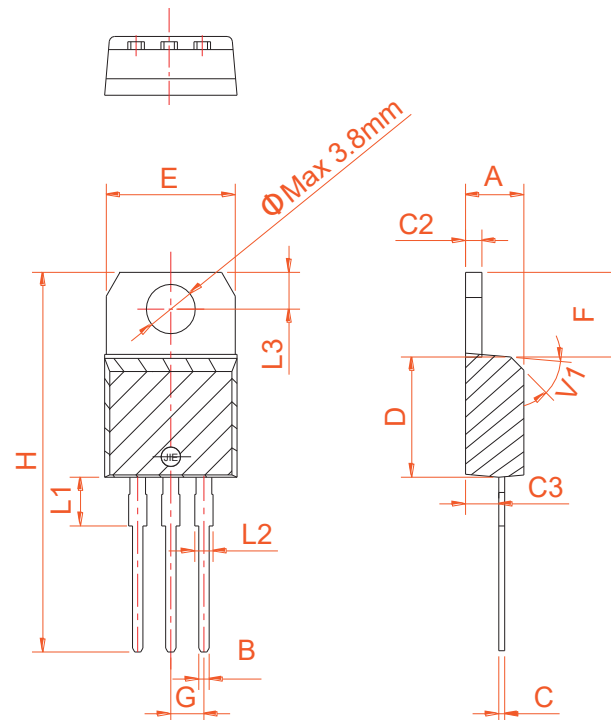


PACKAGE MECHANICAL DATA


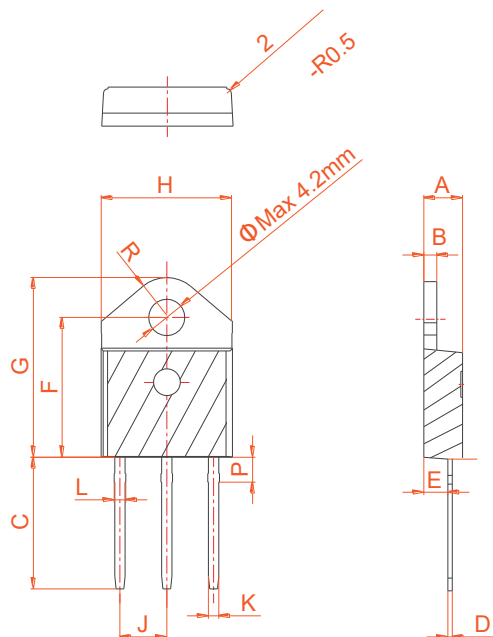
TO-220A Ins

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°	

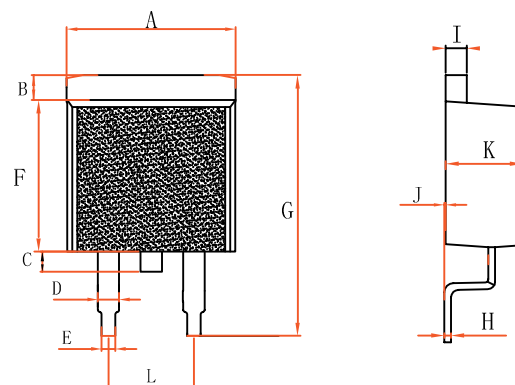


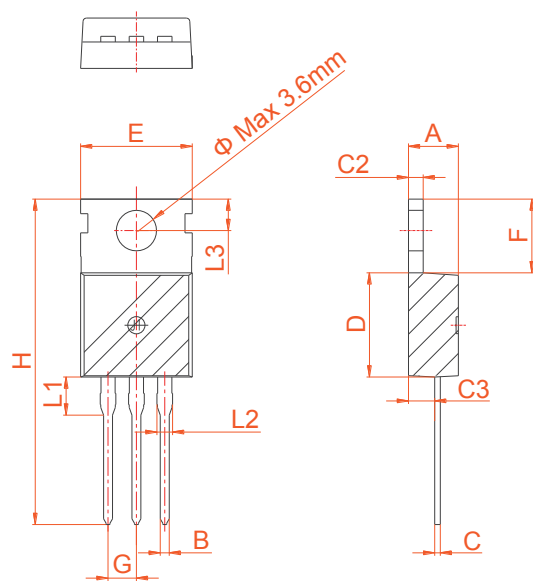
TO-220B Non-Ins

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	9.7		10.4	0.381		0.409
B	1.31		1.62	0.051		0.063
C	0.65		1.22	0.025		0.048
D	1.15		1.36	0.045		0.053
E	0.62		0.95	0.024		0.037
F	8.75		9.32	0.344		0.366
G	14.75		15.8	0.58		0.622
H	0.32		0.48	0.012		0.018
I	1.18		1.36	0.046		0.053
J	0		0.15	0		0.005
K	4.38		4.86	0.172		0.191
L	4.85		5.23	0.19		0.205


TO-263



TO-220C

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.40		4.60	0.173		0.181
B	0.70		0.90	0.028		0.035
C	0.45		0.60	0.018		0.024
C2	1.23		1.32	0.048		0.052
C3	2.20		2.60	0.087		0.102
D	8.90		9.90	0.350		0.390
E	9.90		10.3	0.390		0.406
F	6.30		6.90	0.248		0.272
G		2.54			0.1	
H	28.0		29.8	1.102		1.173
L1		3.39			0.133	
L2	1.14		1.70	0.045		0.067
L3	2.65		2.95	0.104		0.116
Φ		3.6			0.142	