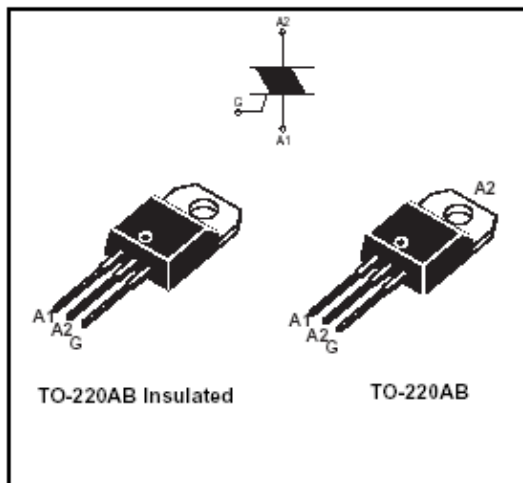


# BTA/BTB08(8A TRIACS)

## MAIN FEATURES:

Symbol	Value	Unit
$I_{T(RMS)}$	8	A
$V_{DRM}/V_{RRM}$	600 and 800	V
$I_{G(Q1)}$	5 to 50	mA



## ABSOLUTE RATING

Symbol	Parameter	Value	Units
$I_{T(RMS)}$	RMS on-state current(full sine wave)	TO-220AB $T_c=110$	8 A
		TO-220AB Ins. $T_c=100$	
$I_{TSM}$	Non-repetive peak on-state current ( $T_j=25^\circ\text{C}$ , full cycle)	F=50Hz $t=20\text{ms}$	80 A
		F=60Hz $t=16.7\text{ms}$	
$di/dt$	Critical rate of rise of on-state current $I_G=2 \times I_{GT}$ , $t_r=100\text{ns}$	F=120Hz $T_j=125$	50 A/ $\mu\text{s}$
$I_{GM}$	Peak gate current	$t_p=20\mu\text{s}$ $T_j=125$	4 A
$P_{G(AV)}$	Average gate power dissipation	$T_j=125$	1 W
$T_{stg}$	Storage junction temperature range		-40 ~ 150
$T_j$	Operating junction temperature range		-40 ~ 150

**THERMAL RESISTANCE**

Symbol	Parameter		Value	Unit
Rth(j-c)	Junction to case	TO-220AB	1.6	/W
		TO-220AB Ins.	2.5	
Rth(j-a)	Junction to ambient	TO-220AB	60	/W
		TO-220AB Ins.		

**ELECTRICAL CHARACTERISTICS (T<sub>j</sub>=25 unless otherwise stated)**

Symbol	Testing conditions	Quadrant		Suffix						Unit
				TW	SW	CW	BW	C	B	
I <sub>GT</sub>	V <sub>D</sub> =12V, R <sub>L</sub> =30	- -	Max	5	10	35	50	25	50	mA
				-	-	-	-	50	100	
V <sub>GT</sub>		ALL	Max	1.3						V
V <sub>GD</sub>	V <sub>D</sub> =V <sub>DRM</sub> , R <sub>L</sub> =3.3K , T <sub>j</sub> =125	ALL	Min	0.2						V
I <sub>L</sub>	I <sub>G</sub> =1.2I <sub>GT</sub>	-	Max	10	25	50	70	40	50	mA
				15	30	60	80	80	100	
I <sub>H</sub>	I <sub>T</sub> =100mA	ALL	Max	10	15	35	50	-	-	mA
	I <sub>T</sub> =500mA			-	-	-	-	25	50	
V <sub>TM</sub>	I <sub>T</sub> =11A, t=380 μs	ALL	Max	1.55						V
I <sub>DRM</sub> I <sub>RRM</sub>	V <sub>DRM</sub> =V <sub>RRM</sub>	T <sub>j</sub> =25	Max	5						μA
		T <sub>j</sub> =125		1						mA
dv/dt	V <sub>D</sub> =67% V <sub>DRM</sub> Gate open T <sub>j</sub> =125		Min	20	40	400	1000	200	400	V/μs