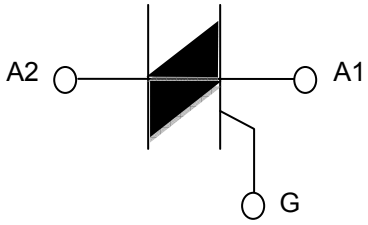
COMSET SEMICONDUCTORS

BTA12 Series

TRIAC

FEATURE

Glass passivated triacs in a plastic TO220 package.
The bta12 series is suitable for general purpose.
They can be used as an ON/OFF function in applications such as static relays,heating regulation, induction motor starting circuits... or for phaseoperation in light dimmers, motorspeed controllers,...
Compliance to RoHS.



ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings	Value		Unit
		BTA12-600B	BTA12-800B	
V_{DRM}	Repetitive peak off-state voltage	600	800	V
V_{RRM}	Repetitive peak reverse voltage	600	800	
$I_{T(RMS)}$	RMS on-state current	12		A
I_{TSM}	Non-repetitive peak on-state current	120		A
T_{stg}	Storage temperature range	-45 to +150		°C
T_j	Operating junction temperature	110		°C

THERMAL CHARACTERISTICS

Symbol	Ratings	Value	Unit
$R_{\partial j\text{-}c}$	Thermal resistance junction to case	≤ 2.3	°C/W
$R_{\partial j\text{-}a}$	Thermal resistance junction to ambient	≤ 60	

BTA12 Series

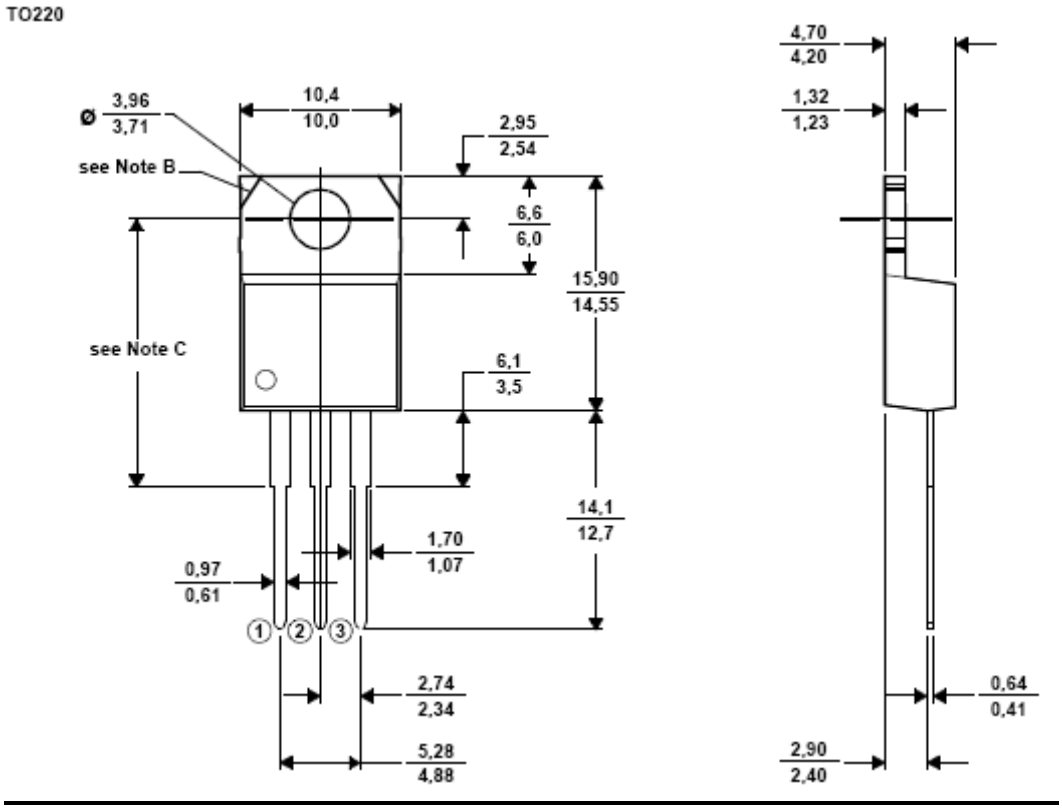
ELECTRICAL CHARACTERISTICS

TC=25°C unless otherwise noted

Symbol	Ratings	Test Condition(s)		Min	Typ	Max	Unit
V_{DRM}	Repetitive peak off-state voltage	I_D = 0.1 mA	BTA12-600B	600	-	-	V
			BTA12-800B	800	-	-	
V_{RRM}	Repetitive peak reverse voltage	I_D = 0.5 mA	BTA12-600B	600	-	-	
			BTA12-800B	800	-	-	
I_{GT}	Gate trigger current	V_D = 12 V R_L = 100 Ω	T2+ G+	-	-	25	mA
			T2+ G-	-	-	50	
			T2- G-	-	-	50	
			T2- G+	-	-	100	
V_{GT}	Gate trigger voltage	V_D = 12 V R_L = 100 Ω	T2+ G+	-	-	1.5	V
			T2+ G-	-	-	1.5	
			T2- G-	-	-	1.5	
			T2- G+	-	-	1.8	
I_H	Holding current	I_T = 100 mA, I_{GT} = 20 mA		-	-	15	mA
V_T	On-state voltage	I_T = 17 A		-	-	1.55	V

BTA12 Series

MECHANICAL DATA CASE TO-220



Pin 1 :	Anode 1
Pin 2 :	Anode 2
Pin 3 :	Gate

Revised August 2012