

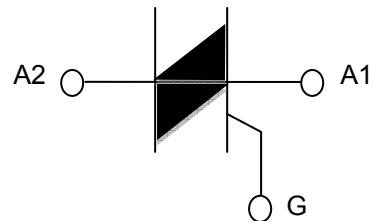
## BTA12 Series

# 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 phase operation in light dimmers, motor speed 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
$R_{\theta j-c}$	Thermal resistance junction to case	$\leq 2.3$	°C/W
$R_{\theta j-a}$	Thermal resistance junction to ambient	$\leq 60$	

## BTA12 Series

### ELECTRICAL CHARACTERISTICS

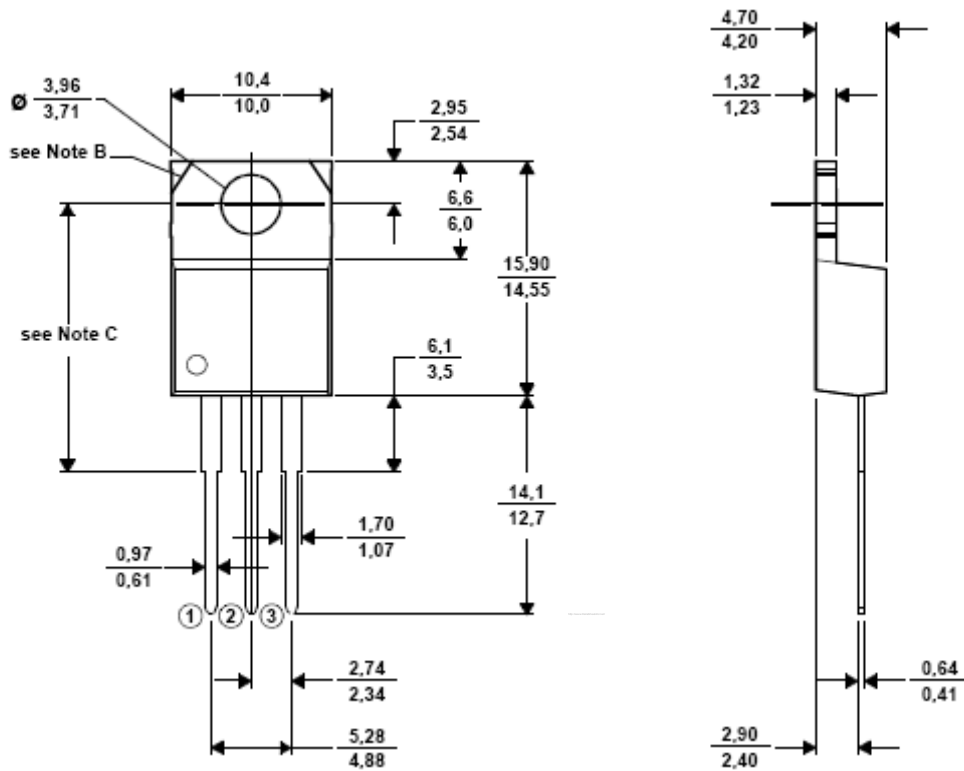
TC=25°C unless otherwise noted

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

## BTA12 Series

### MECHANICAL DATA CASE TO-220

TO220



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

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