



**Triacs sensitive gate**

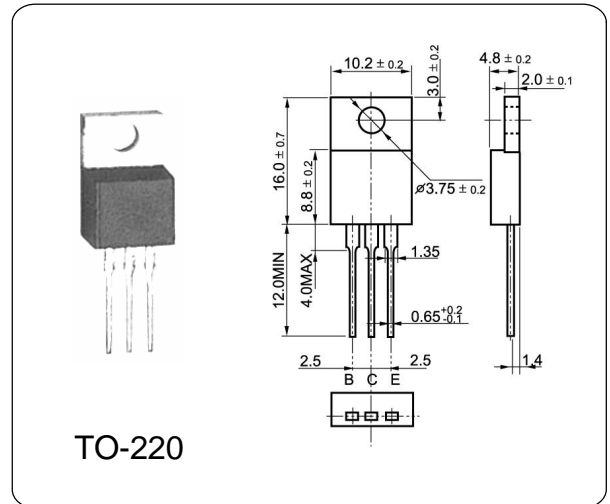
**BT138-600E**

**GENERAL DESCRIPTION**

Glass passivated, sensitive gate triacs in a plastic envelope, intended for use in general purpose bidirectional switching and phase control applications, where high sensitivity is required in all four quadrants.

**ABSOLUTE MAXIMUM RATINGS ( Ta = 25°C )**

Parameter	Symbol	Typ	Unit
Repetitive peak off-state voltages	$V_{DRM}$ $V_{RRM}$	600	V
RMS on-state current	$I_{T(RMS)}$	12	A
Non-repetitive peak on-state current	$I_{TSM}$	95	A
Max. Operating Junction Temperature	$T_j$	110	°C
Storage Temperature	$T_{stg}$	-45~150	°C



**ELECTRICAL CHARACTERISTICS ( Ta = 25°C )**

Parameter		Symbol	Test Conditions	Min	Typ	Max	Unit
Repetitive peak off-state voltages		$V_{DRM}$ $V_{RRM}$		—	600	—	V
RMS on-state current		$I_{T(RMS)}$	full sine wave; $T_{mb} \leq 107^\circ C$	—	12	—	A
On-state voltage		$V_T$	$I_T = 15A$	—	1.4	1.65	V
Holding current		$I_H$	$V_D = 12 V$ ; $I_{GT} = 0.1 A$	—	—	30	mA
Gate trigger current	T2+G+	$I_{GT}$	$V_D = 12 V$ ; $I_T = 0.1 A$	—	—	10	mA
	T2+G-			—	—	10	
	T2-G-			—	—	10	
	T2-G+			—	—	25	
Latching current	T2+G+	$I_L$	$V_D = 12 V$ ; $I_{GT} = 0.1 A$	—	—	30	mA
	T2+G-			—	—	40	
	T2-G-			—	—	30	
	T2-G+			—	—	40	
Gate trigger voltage		$V_{GT}$	$V_D = 12 V$ ; $I_T = 0.1 A$	—	0.7	1.5	V