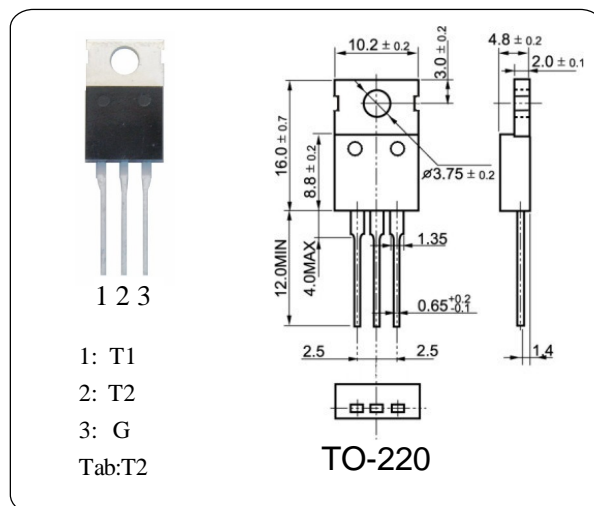


Triacs logic level
BT138-800
GENERAL DESCRIPTION

Passivated, sensitive gate triac in a plastic envelope, intended for use in general purpose bidirectional switching and phase control applications. This device is intended to be interfaced directly to microcontrollers, logic integrated circuits and other low power gate trigger circuits.

ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

Parameter	Symbol	Typ	Unit
Repetitive peak off-state voltages	V_{DRM} V_{RRM}	800	V
RMS on-state current	$I_{T(RMS)}$	12.0	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}	$I_D=0.1mA$	800	—	—	V
RMS on-state current		$I_{T(RMS)}$	full sine wave; $T_{mb} \leq 107^\circ C$	—	12.0	—	A
On-state voltage		V_T	$I_T= 15A$	—	1.4	1.65	V
Holding current		I_H	$V_D = 12 V$; $I_{GT} = 0.1 A$	—	4.0	30	mA
Gate trigger current	T2+G+	I_{GT}	$V_D = 12 V$; $I_T = 0.1 A$	—	2.5	10	mA
	T2+G-			—	4.0	10	
	T2-G-			—	5.0	10	
	T2-G+			—	11	25	
Latching current	T2+G+	I_L	$V_D = 12 V$; $I_{GT} = 0.1 A$	—	3.2	30	mA
	T2+G-			—	16	40	
	T2-G-			—	4.0	30	
	T2-G+			—	5.5	40	
Gate trigger voltage		V_{GT}	$V_D = 12 V$; $I_T = 0.1 A$	—	0.7	1.5	V