Triacs sensitive gate

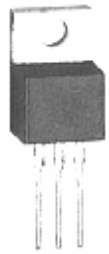
BT138-800

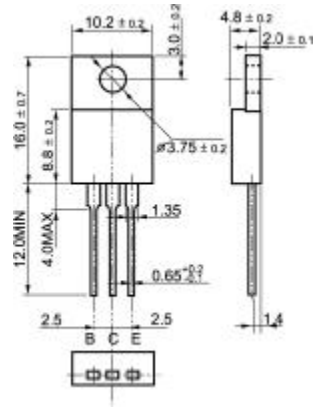
GENERAL DESCRIPTION

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℃)

Parameter	Symbol	Typ	Unit
Repetitive peak off-state voltages	V_{DRM} V_{RRM}	800	V
RMS on-state current	$I_{T(RMS)}$	12	A
Non-repetitive peak on-state current	I_{TSM}	105	A
Max. Operating Junction Temperature	T_j	110	℃
Storage Temperature	T_{stg}	-45~150	℃





TO-220

ELECTRICAL CHARACTERISTICS (Ta = 25℃)

Parameter		Symbol	Test Conditions	Min	Typ	Max	Unit
Repetitive peak off-state voltages		V_{DRM} V_{RRM}		—	800	—	V
RMS on-state current		$I_{T(RMS)}$	full sine wave; T_{mb} ≤107 ℃	—	12	—	A
On-state voltage		V_T	I_T=15A	—	1.4	1.7	V
Holding current		I_H	V_D = 12 V; I_{GT} = 0.1 A	—	—	50	mA
Gate trigger current	T2+G+	I_{GT}	V_D = 12 V; I_T = 0.1 A	—	—	25	mA
	T2+G-			—	—	25	
	T2-G-			—	—	25	
	T2-G+			—	—	50	
Latching current	T2+G+	I_L	V_D = 12 V; I_{GT} = 0.1 A	—	3.0	35	mA
	T2+G-			—	10	40	
	T2-G-			—	2.5	35	
	T2-G+			—	4.0	40	
Gate trigger voltage		V_{GT}	V_D = 12 V; I_T = 0.1 A	—	0.7	1.5	V