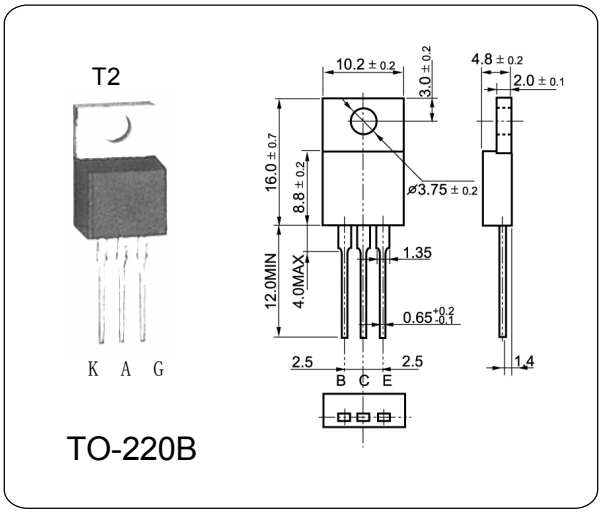
Thyristors
BT152-800R

GENERAL DESCRIPTION

Glass passivated thyristors in a plastic envelope, intended for use in applications requiring high bidirectional blocking voltage capability and high thermal cycling performance. Typical applications include motor control, industrial and domestic lighting, heating and static switching.

ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

Parameter	Symbol	Typ	Unit
Repetitive peak off-state voltages	V_{DRM} V_{RRM}	800	V
Average on-state current	$I_{T(AV)}$	13	A
RMS on-state current	$I_{T(RMS)}$	20	A
Non-repetitive peak on-state current	I_{TSM}	200	A
Max. Operating Junction Temperature	T_j	110	°C
Storage Temperature	T_{stg}	-45~150	°C



TO-220B

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
Average on-state current	$I_{T(AV)}$	half sine wave; T_{mb}< 103 °C	—	13	—	A
RMS on-state current	$I_{T(RMS)}$	all conduction angles	—	20	—	A
On-state voltage	V_T	I_T = 40A	—	1.4	1.75	V
Holding current	I_H	V_D =12 V; I_{GT} = 0.1 A	—	8.0	30	mA
Latching current	I_L	V_D =12 V; I_{GT} = 0.1 A	—	12	40	mA
Gate trigger current	I_{GT}	V_D =12 V; I_T = 0.1 A	—	5.0	15	mA
Gate trigger voltage	V_{GT}	V_D =12 V; I_T = 0.1 A	—	0.7	1.5	V