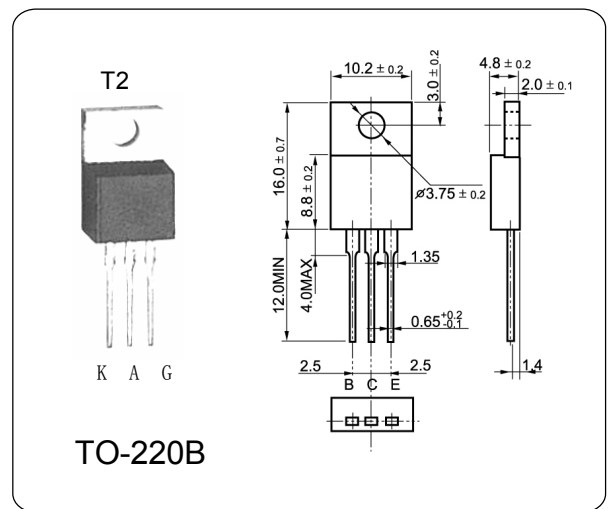


**Thyristors**
**BT151-800R**
**GENERAL DESCRIPTION**

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	$I_{T(AV)}$	7.5	A
RMS on-state current	$I_{T(RMS)}$	12	A
Non-repetitive peak on-state current	$I_{TSM}$	100	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	$V_{DRM}$ $V_{RRM}$	$I_D = 0.1 \text{ mA}$	800	—	—	V
Average on-state current	$I_{T(AV)}$	half sine wave; $T_{mb} < 103 \text{ °C}$	—	—	7.5	A
RMS on-state current	$I_{T(RMS)}$	all conduction angles	—	—	12	A
On-state voltage	$V_T$	$I_T = 23 \text{ A}$	—	1.4	1.75	V
Holding current	$I_H$	$V_D = 12 \text{ V}; I_{GT} = 0.1 \text{ A}$	—	7.0	20	mA
Latching current	$I_L$	$V_D = 12 \text{ V}; I_{GT} = 0.1 \text{ A}$	—	10	40	mA
Gate trigger current	$I_{GT}$	$V_D = 12 \text{ V}; I_T = 0.1 \text{ A}$	—	3	15	mA
Gate trigger voltage	$V_{GT}$	$V_D = 12 \text{ V}; I_T = 0.1 \text{ A}$	—	0.7	1.5	V