

Thyristors

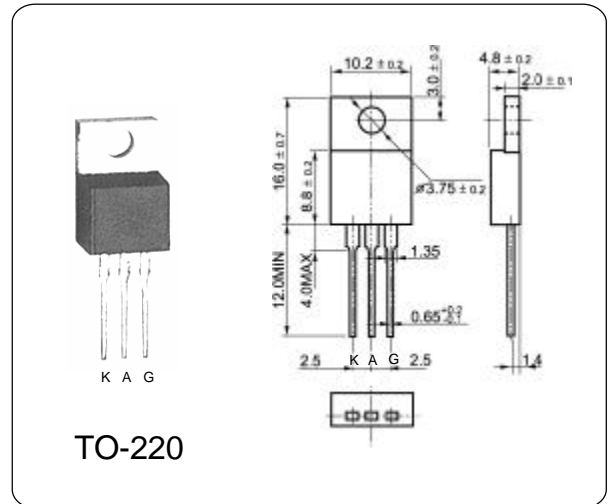
BT152-600

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 domestic lighting, heating and static and switching.

ABSOLUTE MAXIMUM RATINGS ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Typ	Unit
Repetitive peak off-state voltages	V_{DRM} V_{RRM}	600	V
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	$^\circ\text{C}$
Storage Temperature	T_{stg}	-45~150	$^\circ\text{C}$



ELECTRICAL CHARACTERISTICS ($T_a = 25\text{ }^\circ\text{C}$)

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; $T_{mb} \leq 107\text{ }^\circ\text{C}$	—	20	—	A
On-state voltage	V_T	$I_T = 40\text{ A}$	—	1.4	1.75	V
Holding current	I_H	$V_D = 12\text{ V}; I_{GT} = 0.1\text{ A}$	—	15	60	mA
Gate trigger current	I_{GT}	$V_D = 12\text{ V}; I_T = 0.1\text{ A}$	—	3	32	mA
Latching current	I_L	$V_D = 12\text{ V}; I_{GT} = 0.1\text{ A}$	—	25	40	mA
Gate trigger voltage	V_{GT}	$V_D = 12\text{ V}; I_T = 0.1\text{ A}$	—	0.6	1.5	V