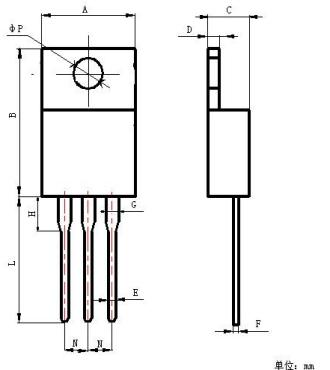


Model number: BT151

Outline of TO-220



Shape: TO-220

Product name: unidirectional thyristor

Polarity: Three pins from left to right 1: K2: A3: G



Uses: Widely used for various universal switches, small motor controllers, Power leakage protectors, lamp relay incentives, logical integrated circuits, high-power silicon doorsteps drivers, and other line power control.

The limit range ( $t_a = 25$  unless otherwise regulations)

Project	Symbol	Rated value	unit
Dispel duplicate peak voltage	$V_{DRM}$	800	V
Repeated repeated peak voltage	$V_{RRM}$	800	V
Plug-in average current	$I_T$	12	A
On-state no repeat surge current	$I_{TSM}$	120	A
Knot temperature	$T_j$	110	°C
Storage temperature	$T_{stg}$	-40~150	°C

Electro-parameter characteristics ( $TA = 25^\circ C$  unless otherwise regulations)

Parameters	Symbol	Test condition	Min	Max	Unit
Off-state repeat peak voltage	$V_{DRM}$		800		V
Reverse repeat peak voltage	$V_{RRM}$		800		V
Repeat peak blocking current	$I_{DRM}$	$V_D=V_{DRM}$		0.1	mA
Peak on-state voltage	$V_{TM}$	$I_T=10A$		1.7	V
Maintain current	$I_H$	$V_D=24V \quad I_T=50mA$		5	mA
Gate-tap current	$I_{GT}$	$V_D=12V \quad R_L=100\Omega$		8	mA
Door trigger voltage	$V_{GT}$	$V_D=12V \quad R_L=100\Omega$		1.5	V
Gate does not trigger current	$V_{GD}$	$V_D=1/2V_{DRM}$	0.2		V
Critical rise rate of off-state voltage	$b_{VD/bt}$	$V_{DM}=67\%V_{DRM}$ Gste open $T_j=100^\circ C$	50		