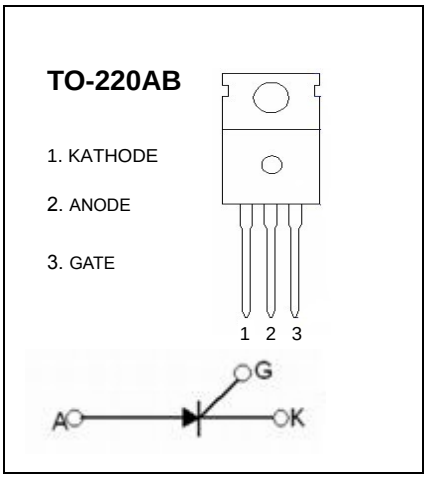
南京集正电子有限公司
NanJing JiZheng Electronics Co.,Ltd

TO-220AB Plastic-Encapsulate Thyristors

BT151 SCR



MAIN FEATURES

Symbol	value	unit
$I_{T(RMS)}$	8	A
V_{DRM}/V_{RRM}	500	V
I_{TSM}	100	A

GENERAL DESCRIPTION

. Glass passivated triacs in a plastic envelope , intended for use in applications requiring high bidirectional transient andblocking 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℃ unless otherwise noted)

symbol	parameter			value	unit
$I_{T(RMS)}$	RMS on-state current (full sine wave)	D^2 PAK/TO-220	T_C=107℃	8	A
I_{TSM}	Non repetitive surge peak on-state current (full sine wave, Tj =25℃)		t=10ms	100	A
			t=8.3ms	110	
I_{GM}	Peak gate current			2	A
$P_{G(AV)}$	Average gate power dissipation		T_j=125℃	0.5	W
T_{stg}	Storage junction temperature range			-40 to +150	℃
T_j	Operating junction temperature range			-40 to +125	

ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

Parameter		Symbol	Test conditions		Min	Max	Unit
Rated repetitive peak off-state/reverse voltage		$V_{DRM,}V_{RRM}$	I_D=10μA		500		V
Rated repetitive peak off-state current		$I_{DRM,}$ I_{RRM}	V_D=620V			10	μA
On-state voltage		V_{TM}	I_T=23A		1.4	1.75	V
Gate trigger current	I	I_{GT}	T_2, G	V_D=12V I_T=0.1A R_L=100Ω		10	mA
Gate trigger voltage	I	V_{GT}	T_2, G	V_D=12V I_T=0.1A R_L=100Ω		1.45	V
Holding current		I_H	I_T =100mA	I_G=20mA		20	mA