南京集正电子有限公司
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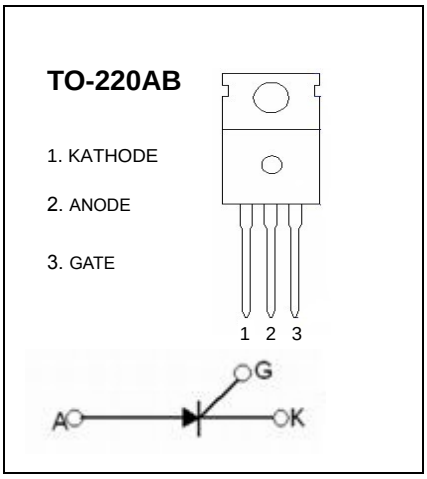
TO-220AB Plastic-Encapsulate Thyristors

BT151 SCR



MAIN FEATURES

Symbol	value	unit
$I_{T(RMS)}$	8	A
V_{DRM}/V_{RRM}	500	V
I_{TSM}	25	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^2PAK/TO-220	T_C=107℃	8	A
I_{TSM}	Non repetitive surge peak on-state current (full sine wave, Tj =25℃)		t=20ms	25	A
			t=16.7ms	27	
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=5A			1.7	V
Gate trigger current	Ⅰ	I_{GT}	T_2(+), G(+)	V_D=12V R_L=100Ω		10	mA
	Ⅱ		T_2(+), G(-)			10	mA
	Ⅲ		T_2(-), G(-)			10	mA
	Ⅳ		T_2(-), G(+)			-	mA
Gate trigger voltage	Ⅰ	V_{GT}	T_2(+), G(+)	V_D=12V R_L=100Ω		1.45	V
	Ⅱ		T_2(+), G(-)			1.45	V
	Ⅲ		T_2(-), G(-)			1.45	V
	Ⅳ		T_2(-), G(+)			-	V
Holding current		I_H	I_T =100mA	I_G=20mA		20	mA