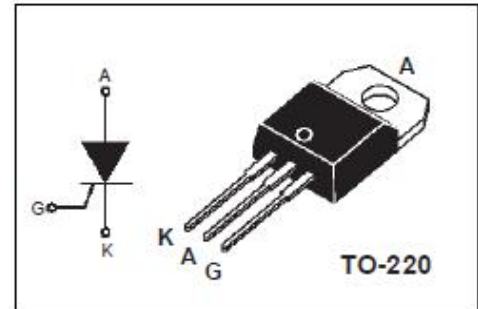


isc Thyristors

BT151

APPLICATIONS

- It is suitable to fit all modes of control found in applications such as overvoltage crowbar protection, motor control circuits in power tools and kitchen aids, in-rush current limiting circuits, capacitive discharge ignition, voltage regulation circuits etc.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

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

SYMBOL	PARAMETER	MIN			UNIT
		500	650	800	
$V_{\text{DRM}}/V_{\text{RRM}}$	Repetitive peak off-state voltage	500	650	800	V
$I_{\text{T(AV)}}$	Average on-state current	7.5			A
$I_{\text{T(RMS)}}$	RMS on-state current	12			A
I_{TSM}	Surge non-repetitive on-state current $t_p=10\text{ms}$	100			A
$P_{\text{G(AV)}}$	Average gate power dissipation	0.5			W
T_j	Operating junction temperature	-40~125			$^\circ\text{C}$
T_{stg}	Storage temperature	-40~150			$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_c=25^\circ\text{C}$ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
				2	mA
V_{TM}	On-state voltage	$I_{\text{TM}}=23\text{A}$		1.75	V
I_{GT}	Gate-trigger current	$V_{\text{D}}=12\text{V}; I_{\text{T}}=0.1\text{A}$		15	mA
V_{GT}	Gate-trigger voltage	$V_{\text{D}}=12\text{V}; I_{\text{T}}=0.1\text{A}$		1.5	V
$R_{\text{th(j-c)}}$	Thermal resistance	Junction to case		1.3	$^\circ\text{C/W}$

NOTICE:

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