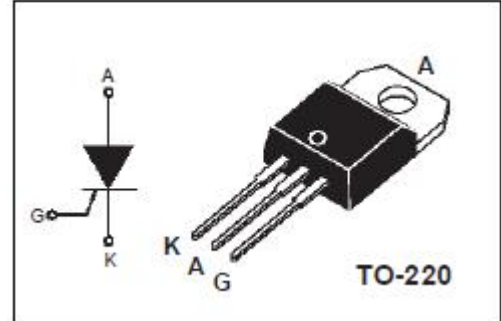


isc Thyristors
BT151-650
APPLICATIONS

- 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°C)

SYMBOL	PARAMETER	MIN	UNIT
V _{DRM}	Repetitive peak off-state voltage	650	V
V _{RRM}	Repetitive peak reverse voltage	650	V
I _{T(AV)}	Average on-state current	7.5	A
I _{T(RMS)}	RMS on-state current	12	A
I _{TSM}	Surge non-repetitive on-state current	T _P =10ms 100	A
P _{G(AV)}	Average gate power dissipation	over any 20 ms period 0.5	W
T _j	Operating junction temperature	-40~125	°C
T _{stg}	Storage temperature	-40~150	°C

ELECTRICAL CHARACTERISTICS (T_c=25°C unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
I _{RRM}	Repetitive peak reverse current	V _{RM} =V _{RRM} , R _{GK} = 220 Ω ,	T _j =25°C	5	μ A
			T _j =125°C	2	mA
I _{DRM}	Repetitive peak off-state current	V _{DM} =V _{DRM} , R _{GK} = 220 Ω	T _j =25°C	5	μ A
			T _j =125°C	2	mA
V _{TM}	On-state voltage	I _{TM} = 23A		1.75	V
I _{GT}	Gate-trigger current	V _D = 12 V; I _T = 0.1 A		15	mA
V _{GT}	Gate-trigger voltage	V _D = 12 V; I _T = 0.1 A		1.5	V
R _{th(j-c)}	Thermal resistance	Junction to case		1.3	°C/W

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