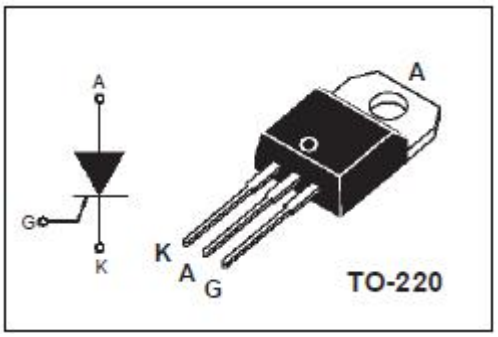
isc Thyristors BT152-600R

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℃)

SYMBOL	PARAMETER		MIN	UNIT
V_{DRM}	Repetitive peak off-state voltage		600	V
V_{RRM}	Repetitive peak reverse voltage		600	V
$I_{T(AV)}$	Average on-stage current		13	A
$I_{T(RMS)}$	RMS on-state current		20	A
I_{TSM}	Surge non-repetitive on-state current	T_P=10ms	200	A
$P_{G(AV)}$	Average gate power dissipation	over any 20 ms period	0.5	W
T_j	Operating junction temperature		-40~125	℃
T_{stg}	Storage temperature		-40~150	℃

ELECTRICAL CHARACTERISTICS (T_C=25℃ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
I_{RRM}	Repetitive peak reverse current	V_{RM}=V_{RRM},R_{GK}= 220Ω,	T_j=25℃		5	μA
			T_j=125℃		2	mA
I_{DRM}	Repetitive peak off-state current	V_{DM}=V_{DRM}, ,R_{GK}= 220Ω	T_j=25℃		5	μA
			T_j=125℃		2	mA
V_{TM}	On-state voltage	I_{TM}= 40A			1.75	V
I_{GT}	Gate-trigger current	V_D = 12 V; I_T = 0.1 A			32	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			1.1	℃/W