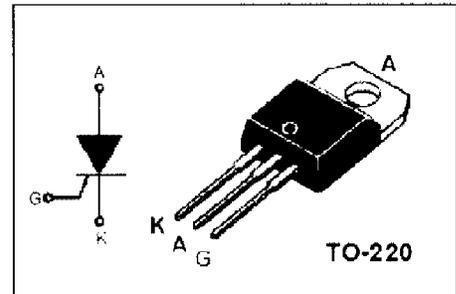


Thyristors

BT152

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.



ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

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-state current	8	A
		T _C =105°C	
I _{T(RMS)}	RMS on-state current	12	A
		T _C =105°C	
I _{TSM}	Surge non-repetitive on-state current	110	A
		T _p =10ms	
P _{G(AV)}	Average gate power dissipation	1	W
		T _j =125°C	
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	μA
			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	μA
			T _j =25°C	2	mA
V _{TM}	On-state voltage	I _{TM} = 24A		1.6	V
I _{GT}	Gate-trigger current	V _D = 12V; R _L =33Ω	2	15	mA
V _{GT}	Gate-trigger voltage	V _D = 12V; R _L =33Ω		1.3	V
I _H	Holding current	I _T = 0.5A; Gate Open		30	mA
R _{th(j-c)}	Thermal resistance	Junction to case		1.3	°C/W

NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

