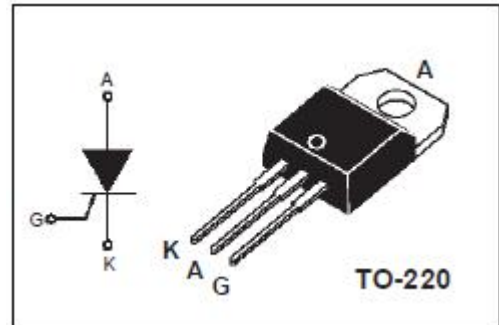


isc Thyristors
TIC106C
APPLICATIONS

- 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	300	V
V _{RRM}	Repetitive peak reverse voltage	300	V
I _{T(RMS)}	RMS on-state current @T _c =80°C	5	A
I _{T(AV)}	Average on-state current @T _c =80°C	3.2	A
I _{TSM}	Surge non-repetitive on-state current	30	A
T _j	Operating junction temperature	-40~110	°C
T _{stg}	Storage temperature	-40~125	°C

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT	
I _{RRM}	Repetitive peak reverse current	V _R =V _{RRM} Rated; I _G =0; T _c =110°C		400	mA	
I _{DRM}	Repetitive peak off-state current	V _D =V _{DRM} Rated; T _c =110°C; R _{GK} =1KΩ		1	mA	
V _{TM}	On-state voltage	I _{TM} = 5A;		1.7	V	
I _{GT}	Gate-trigger current	V _{AA} = 6V; R _L =100Ω; t _P ≥20μs		0.2	mA	
V _{GT}	Gate-trigger voltage	V _{AA} = 6V; R _L =100Ω; t _P ≥20μs; R _{GK} =1KΩ	T _c =-40°C		1.2	V
			T _c =25°C	0.4	1.0	
			T _c =110°C	0.2		

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