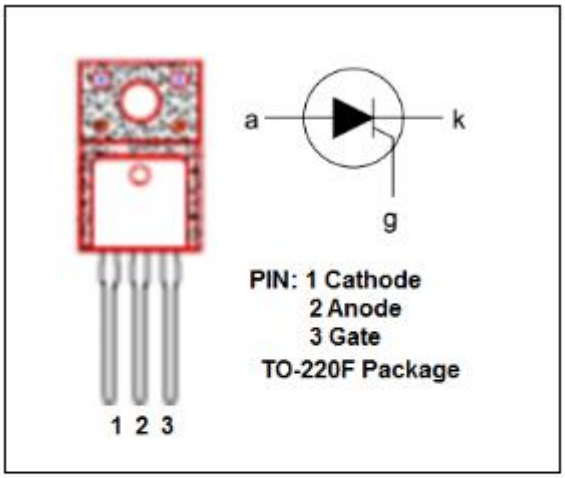
isc Thyristors — TYN610F



DESCRIPTION

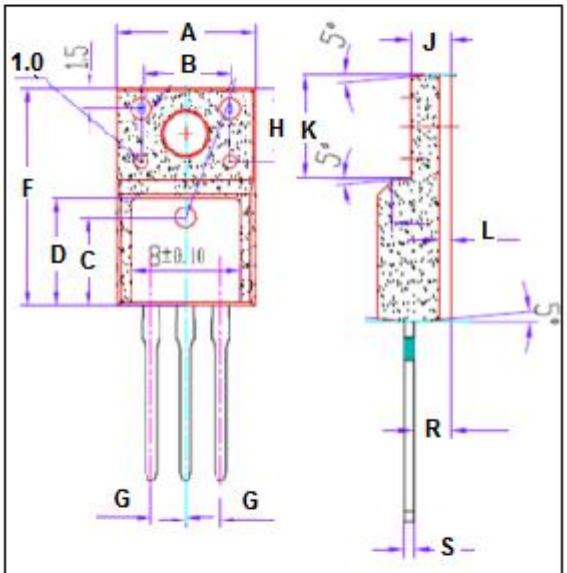
- In a full package ,plastic envelope
- High surge capability
- High state current
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- The TYN610F is designed for power supplies up to 400Hz on resistive or inductive load

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
$I_{T(RMS)}$	RMS On-state current Tc=100℃	10	A
$I_{T(AV)}$	On-state current Tc=100℃	6.4	A
I_{TSM}	Surge non-repetitive on-state current Tp=10ms	100	A
di/dt	Repetitive rate of rise of on-state current after triggering Tj=125℃	50	A/us
I^2t	I^2t for fusing t = 10 ms	50	A^2S
T_j	Operating Junction temperature	125	℃
T_{stg}	Storage temperature	-40 ~+150	℃



DIM	mm MIN	MAX
A	10.06	10.26
B	6.5	
C	6.4	
D	7.7	7.9
F	15.77	15.97
G	2.52	2.56
H	5.3	5.5
J	2.615	2.465
K	6.58	6.78
L	0.7	
R	2.35	
S	0.59	0.61

isc Thyristors TYN610F

ELECTRICAL CHARACTERISTICS (TC=25℃ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
I_{RRM}	Repetitive peak reverse current	V_{RR}=600V, Tj=25℃			0.01	mA
I_{DRM}	Repetitive peak off-state current	V_{DR}=600V, Tj=25℃			0.01	mA
V_{TM}	On-state voltage	I_{TM}= 20A			1.6	V
I_{GT}	Gate-trigger current	V_D=12V; R_L=33Ω			15	mA
V_{GT}	Gate-trigger voltage	V_D=12V; R_L=33Ω			1.5	V
I_H	Holding current	I_T=0.1A			30	mA
I_L	Latching current	I_G=1.2I_{GT}			50	mA