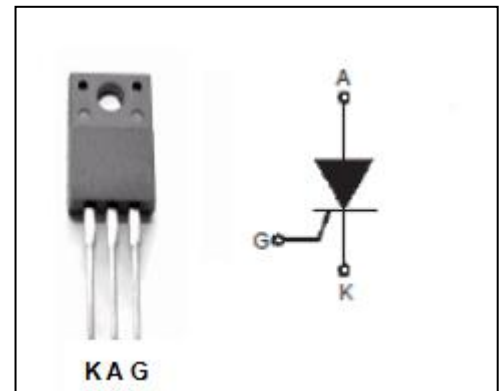


isc Thyristors
TYN16X-600CT
APPLICATIONS

- 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

and reliable operation


ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER		Max	UNIT
V_{DRM}	Repetitive peak off-state voltage		600	V
V_{RRM}	Repetitive peak reverse voltage		600	V
$I_{\text{T(RMS)}}$	RMS on-state current	@ $T_h \leq 81^\circ\text{C}$	16	A
$I_{\text{T(AV)}}$	Average on-state current	@ $T_h \leq 81^\circ\text{C}$	10.2	A
$P_{\text{G(AV)}}$	Average gate power dissipation		1	W
I_{TSM}	Surge non-repetitive on-state current	$T_p=8.3\text{ms}$	198	A
		$T_p=10\text{ms}$	180	
T_j	Operating junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-40~150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_c=25^\circ\text{C}$ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
I_{RRM}	Repetitive peak reverse current	$V_R = 600\text{ V}$	$T_j=150^\circ\text{C}$		1	mA
I_{DRM}	Repetitive peak off-state current	$V_D = 600\text{ V}$	$T_j=150^\circ\text{C}$		1	mA
V_{TM}	On-state voltage	$I_{\text{TM}}= 32\text{A}; T_j=25^\circ\text{C}$			1.6	V
I_{GT}	Gate-trigger current	$V_D = 12\text{ V}; I_T=0.1\text{A}; T_j=25^\circ\text{C}$			15	mA
V_{GT}	Gate-trigger voltage	$V_D = 12\text{ V}; I_T=0.1\text{A}; T_j=25^\circ\text{C}$			1.3	V
		$V_D = 400\text{ V}; I_T=0.1\text{A}; T_j=125^\circ\text{C}$		0.2		
$R_{\text{th(j-h)}}$	Thermal resistance	Junction to case			2.5	$^\circ\text{C/W}$

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