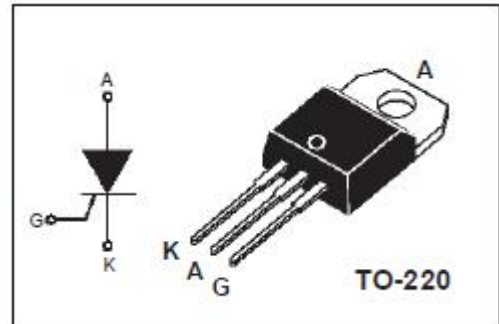


isc Thyristors
TYN625
APPLICATIONS

- 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 ($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	MIN	UNIT
V_{DRM}	Repetitive peak off-state voltage	800	V
V_{RRM}	Repetitive peak reverse voltage	800	V
$I_{T(RMS)}$	RMS on-state current	25	A
$I_{T(AV)}$	Average on-state current	16	A
I_{TSM}	Surge non-repetitive on-state current	314	A
T_j	Operating junction temperature	110	$^\circ\text{C}$
T_{stg}	Storage temperature	-45~150	$^\circ\text{C}$

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
I_H	Holding current	$I_T=500\text{mA}$ Gate open		50	mA
I_L	Latching current	$I_G=1.2I_{GT}$		90	mA
V_{TM}	On-state voltage	$I_{TM}=50\text{A}; T_p=380\mu\text{s}$		1.6	V
I_{GT}	Gate-trigger current	$V_D=12\text{V}; I_T=0.1\text{A}$		40	mA
V_{GT}	Gate-trigger voltage	$V_D=12\text{V}; I_T=0.1\text{A}$		1.3	V
I_{RRM}	Repetitive peak reverse current	$V_{RRM}=V_{DRM}$	$T_c=25^\circ\text{C}$	5	μA
			$T_c=125^\circ\text{C}$	4	mA
I_{DRM}	Repetitive peak off-state current	$V_{RRM}=V_{DRM}$	$T_c=25^\circ\text{C}$	5	μA
			$T_c=125^\circ\text{C}$	4	mA

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