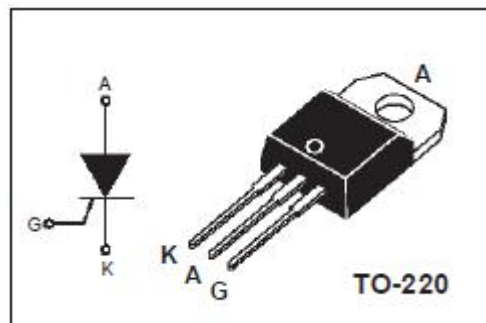


isc Thyristors

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
$I_{\text{T(RMS)}}$	RMS on-state current	25	A
$I_{\text{T(AV)}}$	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	$I_{\text{TM}}=50\text{A}$; $T_p=380\mu\text{s}$		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	$V_{\text{RRM}}=V_{\text{DRM}}$	$T_c=25^{\circ}\text{C}$	5	μA
			$T_c=125^{\circ}\text{C}$	4	mA
I_{DRM}	Repetitive peak off-state current	$V_{\text{RRM}}=V_{\text{DRM}}$	$T_c=25^{\circ}\text{C}$	5	μA
			$T_c=125^{\circ}\text{C}$	4	mA

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