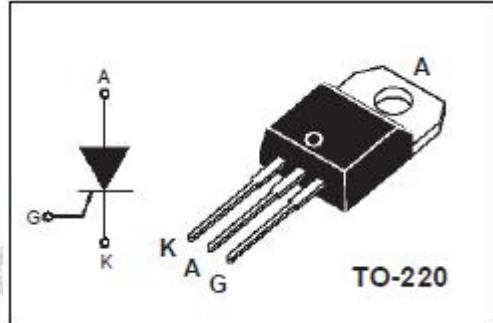


## isc Thyristors

## 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
$V_{\text{DRM}}$	Repetitive peak off-state voltage	800	V
$V_{\text{RRM}}$	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
$I_{\text{TSM}}$	Surge non-repetitive on-state current	314	A
$T_j$	Operating junction temperature	110	$^\circ\text{C}$
$T_{\text{stg}}$	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	$IT=500\text{mA}$ Gate open		50	mA
$I_L$	Latching current	$IG=1.2IGT$		90	mA
$V_{\text{TM}}$	On-state voltage	$I_{\text{TM}}=50\text{A}; T_p=380\ \mu\text{s}$		1.6	V
$I_{\text{GT}}$	Gate-trigger current	$V_D = 12\text{ V}; IT = 0.1\text{ A}$		40	mA
$V_{\text{GT}}$	Gate-trigger voltage	$V_D = 12\text{ V}; IT = 0.1\text{ A}$		1.3	V
$I_{\text{RRM}}$	Repetitive peak reverse current	$V_{\text{RRM}} = V_{\text{DRM}}$	$T_c=25^\circ\text{C}$	5	$\mu\text{A}$
			$T_c=125^\circ\text{C}$	4	mA
$I_{\text{DRM}}$	Repetitive peak off-state current	$V_{\text{RRM}} = V_{\text{DRM}}$	$T_c=25^\circ\text{C}$	5	$\mu\text{A}$
			$T_c=125^\circ\text{C}$	4	mA