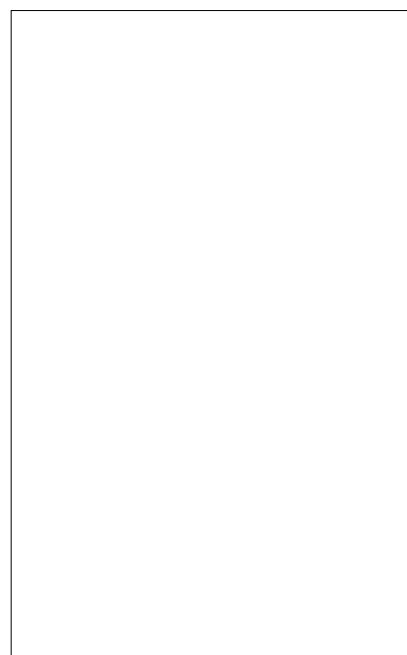




**DESCRIPTION:**

With high ability to withstand the shock loading of large current, TYN825 SCR provides high dV/dt rate with strong resistance to electromagnetic interference. It is especially recommended for use on solid state relay, motorcycle, power charger, T-tools etc. Package TO-220C is RoHS compliant.



**MAIN FEATURES**

**ABSOLUTE MAXIMUM RATINGS**

Parameter	Symbol	Value	Unit
Storage junction temperature range	$T_{stg}$	-40-150	
Operating junction temperature range	$T_j$	-40-125	
Repetitive peak off-state voltage ( $T_j=25^\circ\text{C}$ )	$V_{DRM}$	800	V
Repetitive peak reverse voltage ( $T_j=25^\circ\text{C}$ )	$V_{RRM}$	800	V
Average on-state current ( $T_c=102^\circ\text{C}$ )	$I_{T(AV)}$	16	A
RMS on-state current ( $T_c=102^\circ\text{C}$ )	$I_{T(RMS)}$	25	A
Non repetitive surge peak on-state current ( $t_p=10\text{ms}, T_j=25^\circ\text{C}$ )	$I_{TSM}$	320	A
Non repetitive surge peak on-state current ( $t_p=8.3\text{ms}, T_j=25^\circ\text{C}$ )		352	
$I^2t$ value for fusing ( $t_p=10\text{ms}, T_j=25^\circ\text{C}$ )	$I^2t$	512	$\text{A}^2\text{s}$
Critical rate of rise of on-state current ( $I_G=2 \times I_{GT}, f=100\text{Hz}, T_j=125^\circ\text{C}$ )	$di/dt$	200	$\text{A}/\mu\text{s}$
Peak gate current ( $t_p=20\mu\text{s}, T_j=125^\circ\text{C}$ )	$I_{GM}$	5	A
Average gate power dissipation ( $T_j=125^\circ\text{C}$ )	$P_{G(AV)}$	1	W





FIG.1: Maximum power dissipation versus RMS on-state current

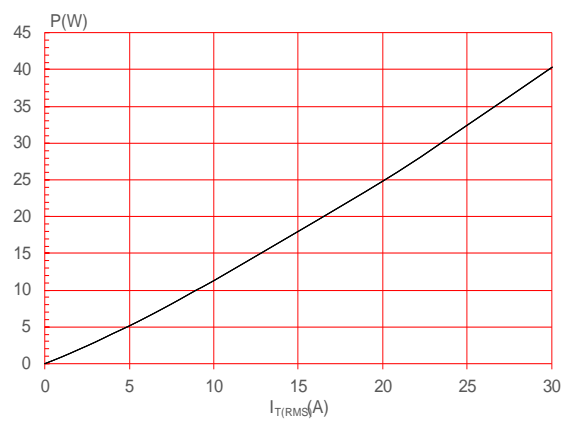


FIG.3: Surge peak on-state current versus number of cycles

FIG.2: RMS on-state current versus case temperature

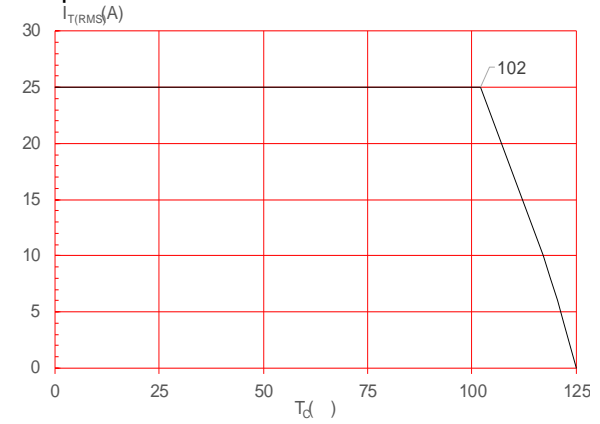
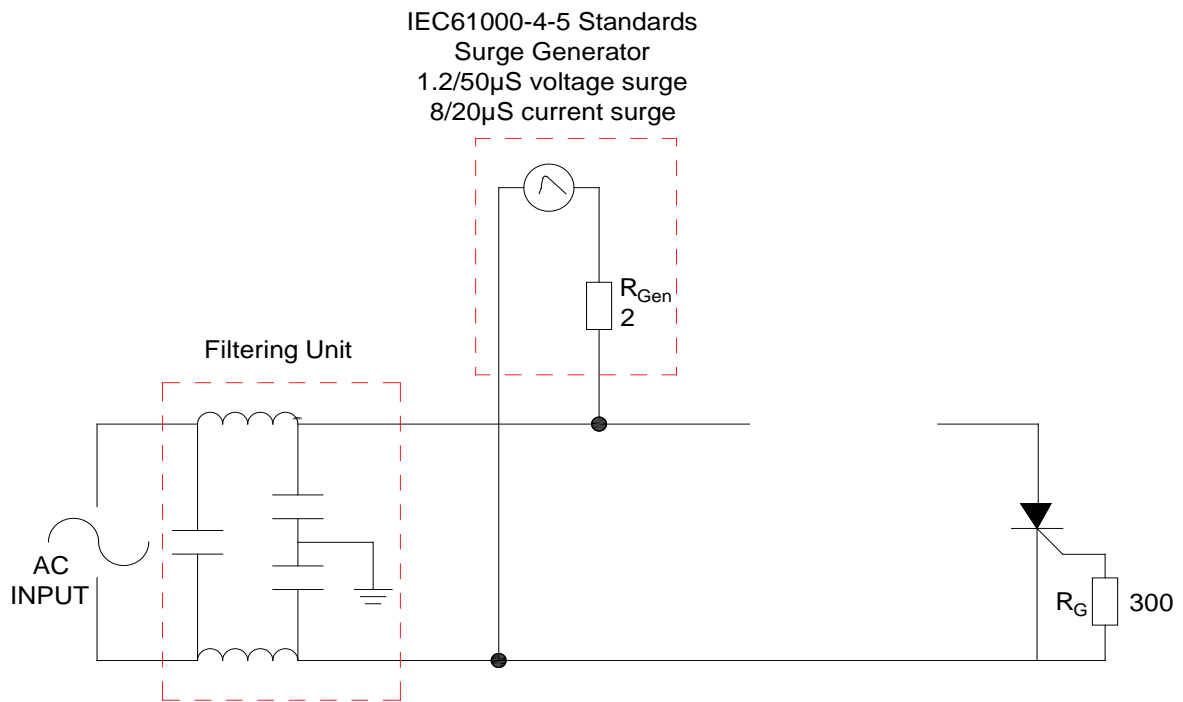


FIG.4: On-state characteristics

FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards.



## ORDERING INFORMATION

Order code	Voltage $V_{DRM}/V_{RRM}$ (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
TYN825	800	20	TO-220C	50	Tube

## Document Revision History

Date	Revision	Changes
Apr.13, 2023	A.1.0	Last update
Oct.14, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA


TYN825

 Jie Jie Microelectronics Co., Ltd.

PACKAGE MECHANICAL DATA G in.Type.M im ax.Mensions in.T



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