

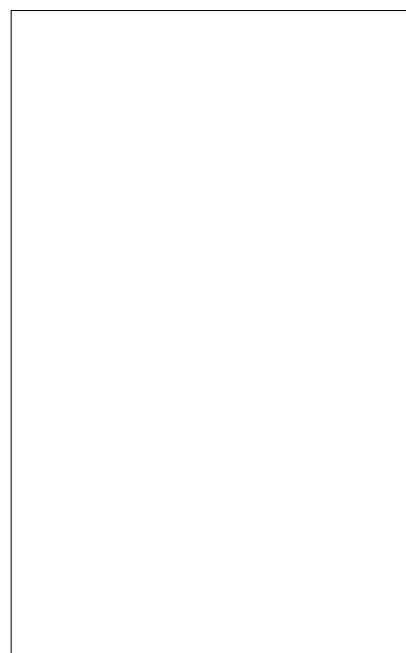


TYN825 25A SCR

Rev.A.1.1

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 °C)	V _{DRM}	800	V
Repetitive peak reverse voltage (T _j =25 °C)	V _{RRM}	800	V
Average on-state current (T _c 102 °C)	I _{T(AV)}	16	A
RMS on-state current (T _c 102 °C)	I _{T(RMS)}	25	A
Non repetitive surge peak on-state current (t _p =10ms, T _j =25 °C)	I _{TSM}	320	A
Non repetitive surge peak on-state current (t _p =8.3ms, T _j =25 °C)		352	
I ² t value for fusing (t _p =10ms , T _j =25 °C)	I ² t	512	A ² s
Critical rate of rise of on-state current (I _G =2x I _{GT} , f=100Hz , T _j =125 °C)	di/dt	200	A/μs
Peak gate current (t _p =20μs , T _j =125 °C)	I _{GM}	5	A
Average gate power dissipation (T _j =125 °C)	P _{G(AV)}	1	W

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

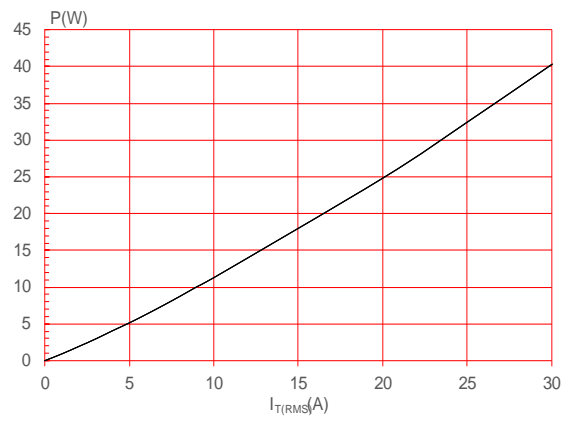


FIG.3: Surge peak on-state current versus number of cycles

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

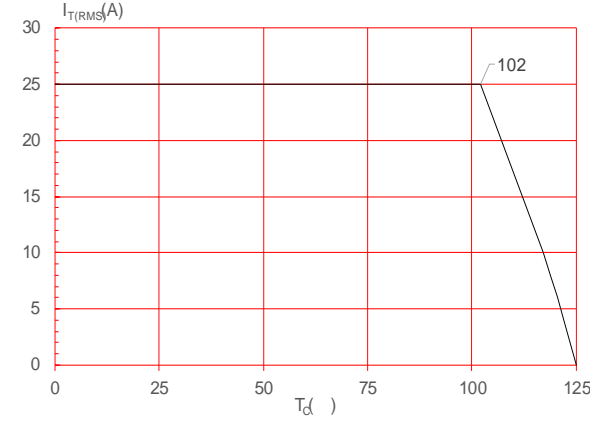
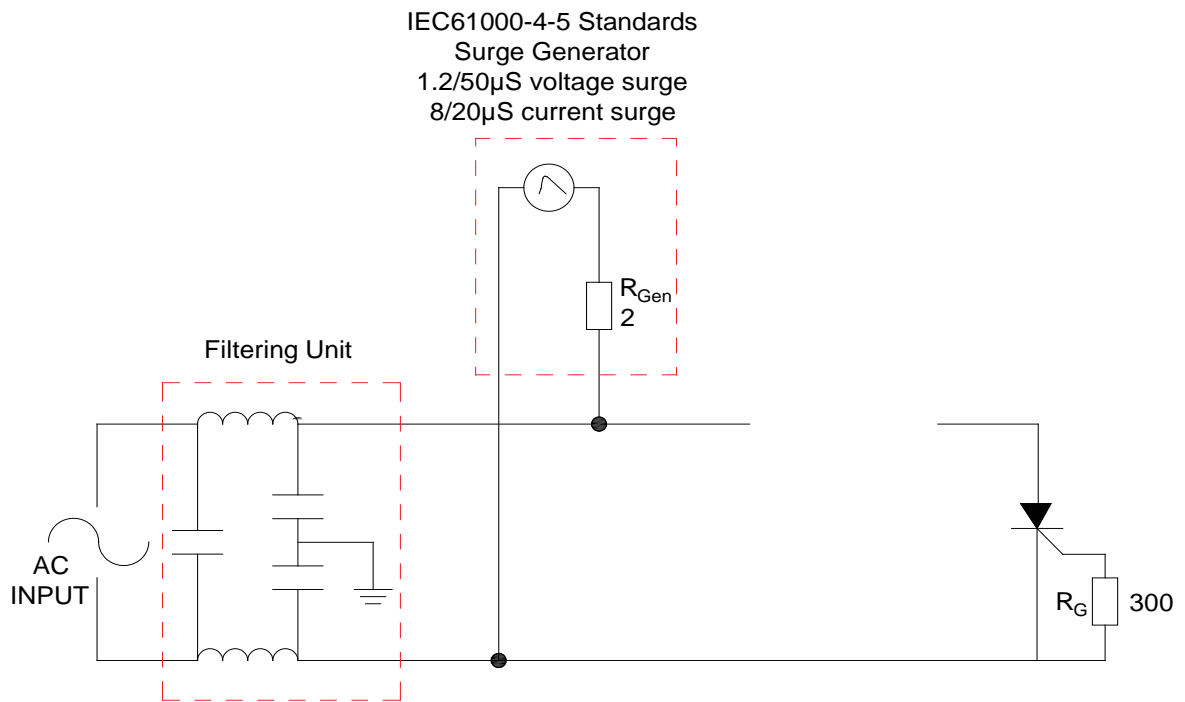


FIG.4: On-state characteristics

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

PACKAGE MECHANICAL DATA



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