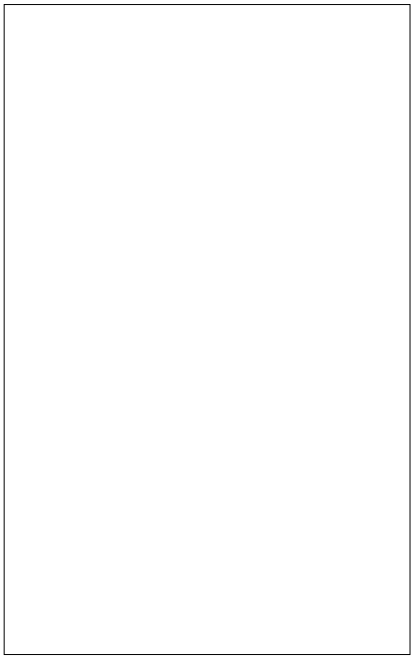
TYN825 25A SCR

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)	V_{DRM}	800	V
Repetitive peak reverse voltage (T_j=25)	V_{RRM}	800	V
Average on-state current ($T_C \leq$ 102)	$I_{T(AV)}$	16	A
RMS on-state current ($T_C \leq$ 102)	$I_{T(RMS)}$	25	A
Non repetitive surge peak on-state current (t_p=10ms, T_j=25)	I_{TSM}	320	A
Non repetitive surge peak on-state current (t_p=8.3ms, T_j=25)		352	
I^2t value for fusing (t_p=10ms , T_j=25)	I^2t	512	A^2s
Critical rate of rise of on-state current (I_G=2× I_{GT}, f=100Hz , T_j=125)	dI/dt	200	A/μs
Peak gate current (t_p=20μs , T_j=125)	I_{GM}	5	A
Average gate power dissipation (T_j=125)	$P_{G(AV)}$	1	W

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

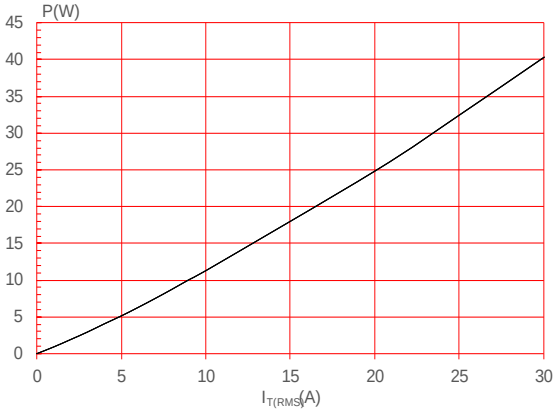


FIG.2: RMS on-state current versus case temperature

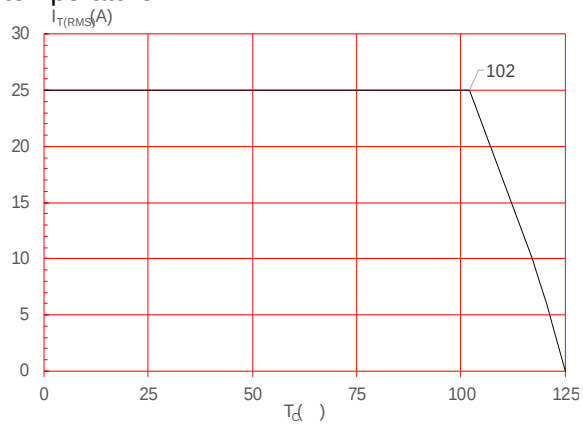
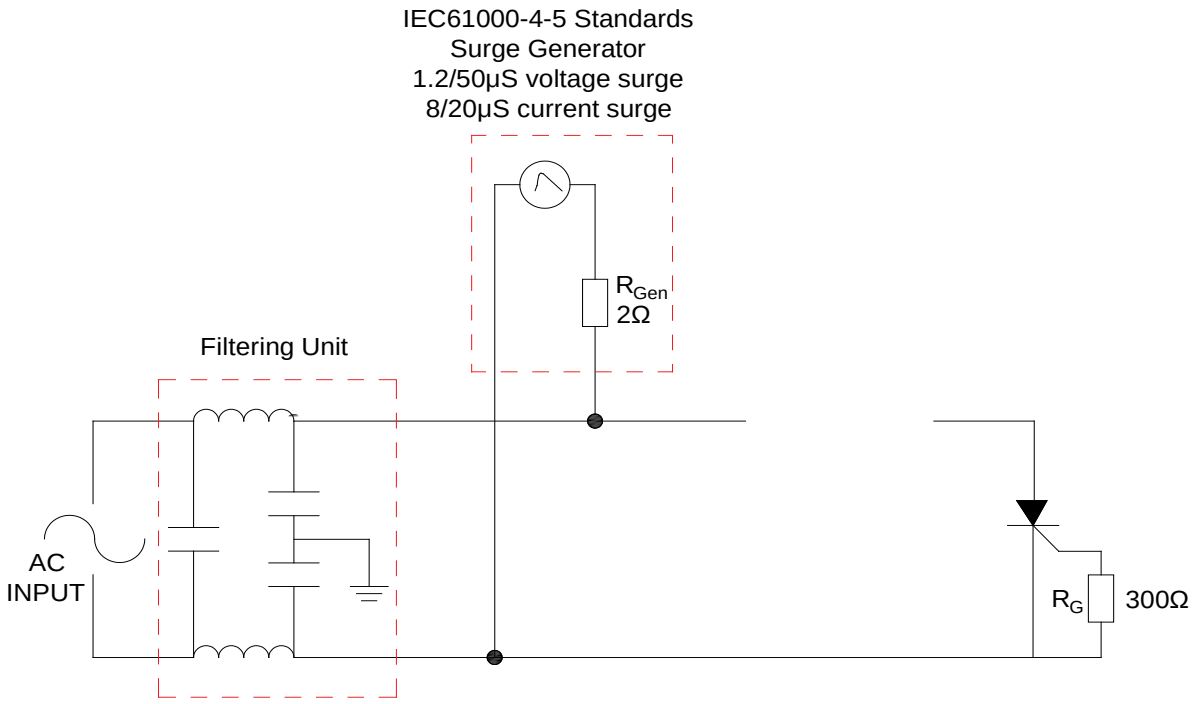


FIG.3: Surge peak on-state current versus number of cycles

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 Dimensions in Typ. Max. Dimensions in T