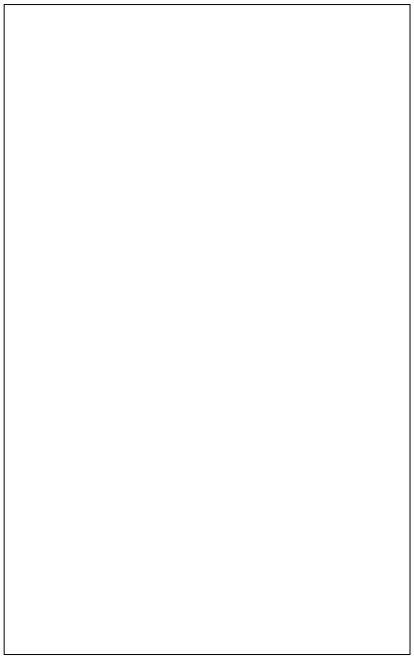
TYN825 25A SCR **Rev.A.1.1**

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

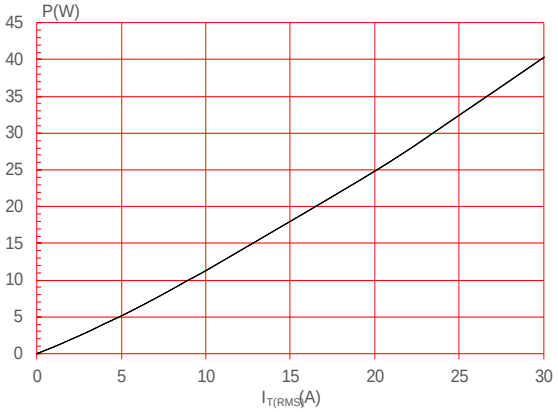


FIG.2: RMS on-state current versus case temperature

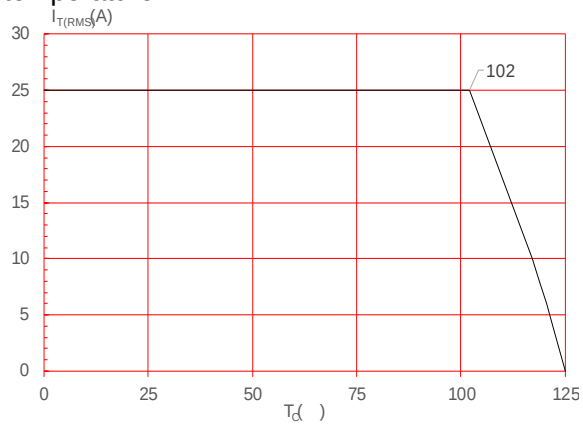
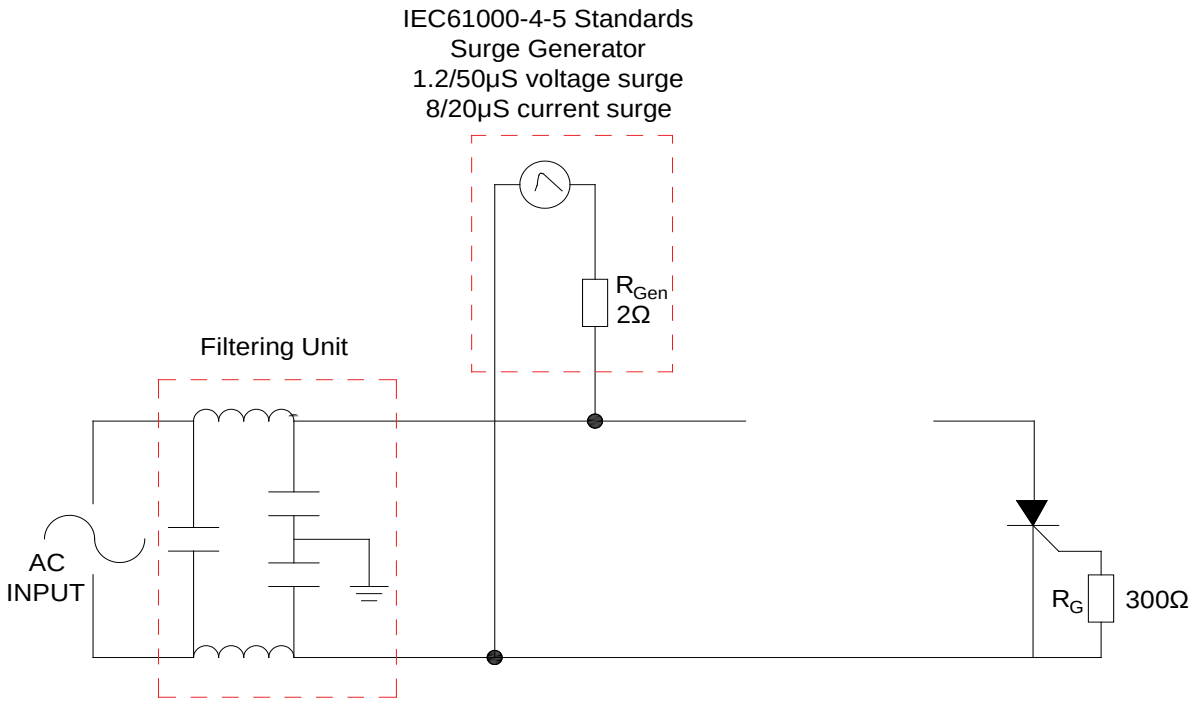


FIG.3: Surge peak on-state current versus number of cycles

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	Millimeters			Inches		
	Ref.	Min.	Typ.	Max.	Min.	Typ.	Max.
HD							

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