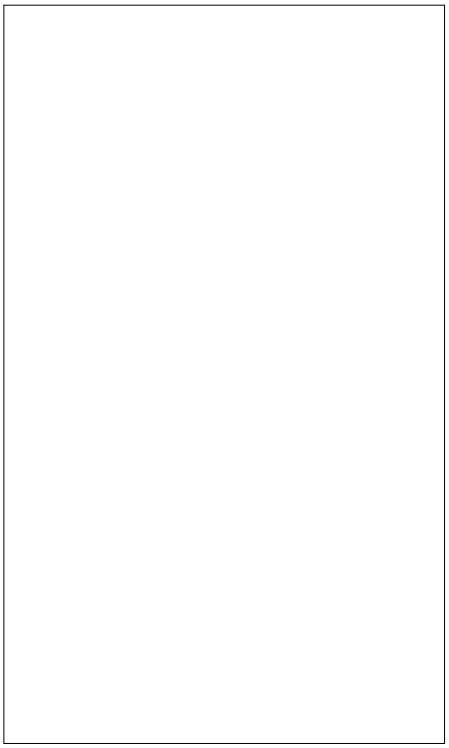
ACJT825-10H 8A TRIAC

Rev.A.1.1

DESCRIPTION:

The ACJT825-10H triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controllers. The ACJT825-10H embeds a TVS structure to absorb the inductive turn-off energy such as those described in the IEC 61000-4-5 standards. Package TO-251 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}	1000	V
Repetitive peak reverse voltage (T_j=25)	V_{RRM}	1000	V
RMS on-state current (T_C 093)	$I_{T(RMS)}$	8	A
Non repetitive surge peak on-state current (full cycle , t_p=20ms , T_j=25)	I_{TSM}	80	A
Non repetitive surge peak on-state current (full cycle , t			

Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.7)	V_{pp}	2.5	kV

ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	V_D =12V R_L =33Ω	- -	MAX.	25	mA
V_{GT}		- -	MAX.	1	V
V_{GD}	V_D =V_{DRM} T_j =125 R_L =3.3kΩ	- -	MIN.	0.2	V
I_L	I_G =1.2I_{GT}	-	MAX.	35	mA
				55	
I_H	I_T =100mA		MAX.	30	mA
dV/dt	V_D=670V Gate Open T_j =125		MIN.	1500	V/μs
(dI/dt)c	(dV/dt)c=10V/μs, T_j=125		MIN.	8	A/ms
t_{on}	I_G=40mA I_A=200mA I_R=20mA T_j=25		TYP.	5	μs
t_{off}				70	
V_{CL}	I_{CL}=0.1mA t_p=1ms		MIN.	1050	V

STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	I_{TM} =10A t_p=380μs	T_j=25	1 .4	V
V_{TO}	Threshold voltage	T_j=125	0.78	V
R_D	Dynamic resistance	T_j=125	38	mΩ
I_{DRM}	V_D =V_{DRM} V_R =V_{RRM}	T_j=25	8	μA
I_{RRM}		T_j=125	0 .8	mA

THERMAL RESISTANCES

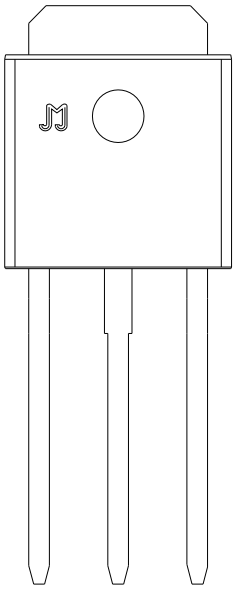
Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (AC)	3	/W
$R_{th(j-a)}$	junction to ambient (AC)	100	/W

ORDERING INFORMATION

AC J T 8 25 -10 H

- AC: AC switch
- J: JieJie Microelectronics Co., Ltd.
- T: Triacs
- 8: $I_{T(RMS)}$:8A
- 25: I_{GT1-3} 025mA
- 10: V_{DRM} /V_{RRM} 11000V
- H: H:TO-251

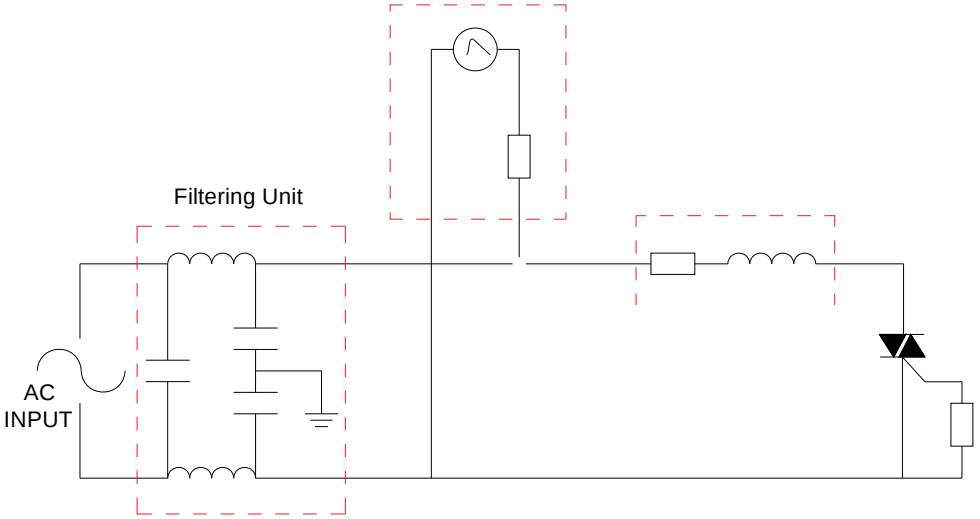
MARKING



Year
Month
Production Code

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

IEC61000-4-5 Standards



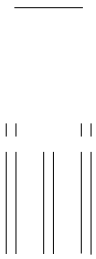
ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
ACJT825-10H	1000	25	TO-251	80	Tube

Document Revision History

Date	Revision	Changes
Apr.13, 2023	A.1.0	Last updated
Oct.24, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA

PACKAGE MECHANICAL DATA



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