

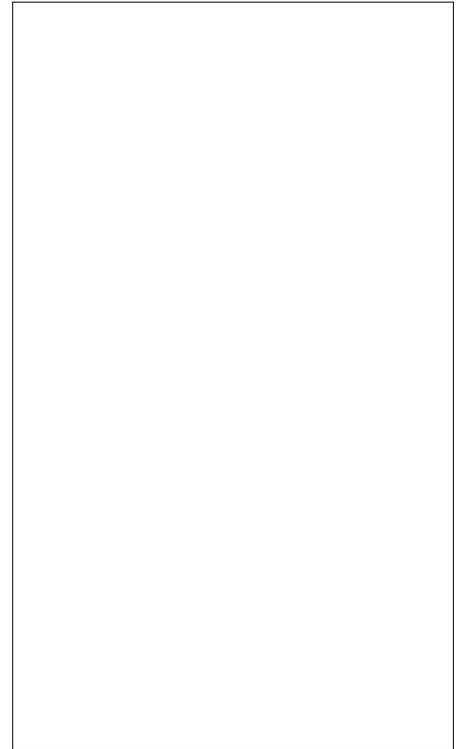


ACJT105-6W 1A TRIAC

Rev.A.1.1

DESCRIPTION:

The ACJT105-6W 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 ACJT105-6W embeds a TVS structure to absorb the inductive turn-off energy such as those described in the IEC 61000-4-5 standards.



Peak pulse voltage ($T_j=25$; non-repetitive, off-state; FIG.8)	V_{pp}	3.5	kV
--	----------	-----	----

ELECTRICAL CHARACTERISTICS ($T_j=25$ unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	$V_D=12V R_L=33$	- -	MAX.	5	mA
V_{GT}		- -	MAX.	1	V
V_{GD}	$V_D=V_{DRM} T_j=125$ $R_L=3.3k$	- -	MIN.	0.2	V
I_L	$I_G=1.2I_{GT}$	-	MAX.	10	mA
				20	
I_H	$I_T=100mA$		MAX.	10	mA
dV/dt	$V_D=400V$ Gate Open $T_j=125$		MIN.	700	V/ μs
$(dI/dt)_c$	$(dV/dt)_c=10V/\mu s, T_j=125$		MIN.	0.5	A/ms
t_{on}	$I_G=10mA I_A=200mA I_R=20mA$ $T_j=25$		TYP.	2	μs
t_{off}				20	
V_{CL}	$I_{CL}=0.1mA t_p=1ms$		MIN.	700	V

STATIC CHARACTERISTICS

Symbol	Parameter	Value(MAX.)	Unit
--------	-----------	-------------	------

348 V_{TM} 25.88 I_{TT} 0.88 $t_{on}(C_1)$ 20 t_{off} 0.004 T_c -02 T_j EMC <021D T_{FW} -0.001 T_{M} () T_j EMC sUni 0 12 94.44 3368

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

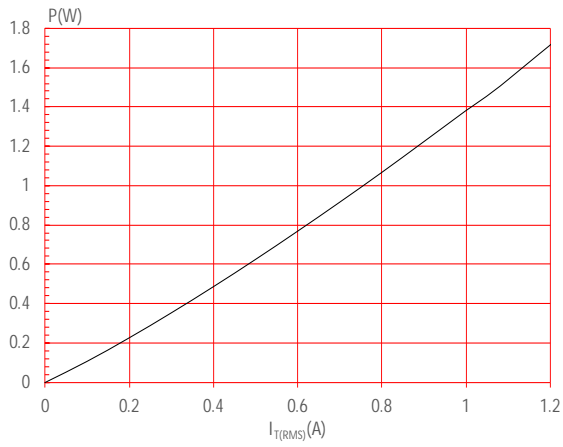


FIG.2: RMS on-state current versus case temperature

FIG.7: Relative variations of gate trigger current, holding current and latching current versus junction temperature

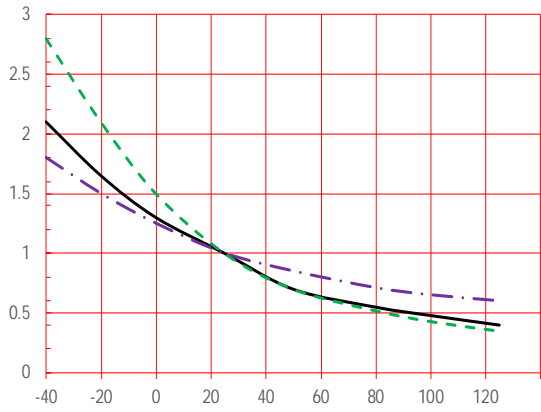
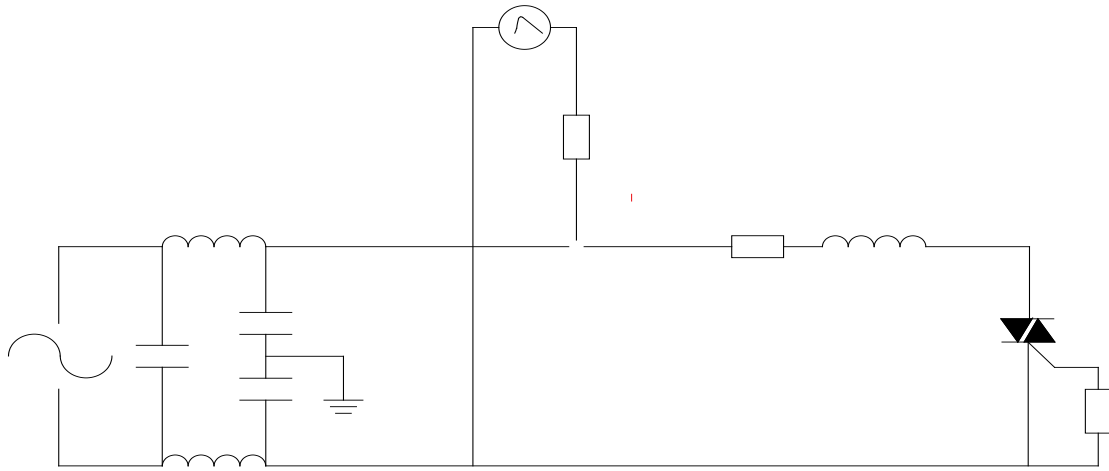


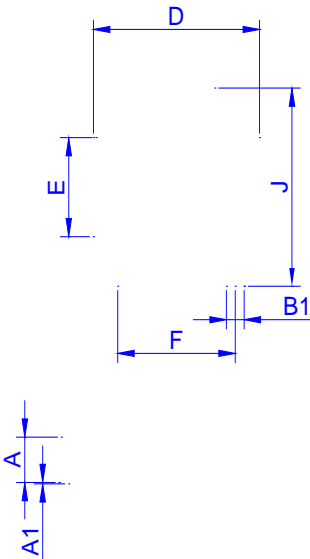
FIG.8 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



ORDERING INFORMATION

Order code	Voltage V _{max} /V _{avg} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
ACJT105-6W	600	5	SOT-223-2L	4,000	Tape & Reel

PACKAGE MECHANICAL DATA



Information furnished in this document is believed to be accurate and reliable. However, Jiangsu JieJie Microelectronics Co., Ltd. assumes no responsibility for the consequences of use without consideration for such information nor use beyond it. Information mentioned in this document is subject to change without notice, apart from that when an agreement is signed, Jiangsu JieJie complies with the agreement.

Products and information provided in this document have no infringement of patents. Jiangsu JieJie assumes no responsibility for any infringement of other rights of third parties which may result from the use of such products and information. This document supersedes and replaces all information previously supplied.

 is a registered trademark of Jiangsu JieJie Microelectronics Co., Ltd.
Copyright © 2025 Jiangsu JieJie Microelectronics Co., Ltd. All rights reserved.