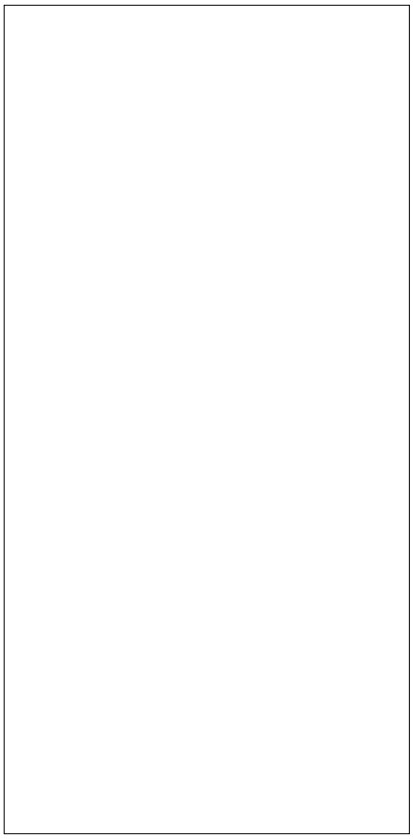
ACJT1010-10A 10A TRIAC

Rev.A.1.1

DESCRIPTION:

The ACJT1010-10A 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 ACJT1010-10A embeds a TVS structure to absorb the inductive turn-off energy such as those described in the IEC 61000-4-5 standards. By using an internal ceramic pad, ACJT1010-10A provides a rated insulation voltage of 2500 VRMS. Package TO-220A 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 95)	$I_{T(RMS)}$	10	A
Non repetitive surge peak on-state current (full cycle , t_p=20ms , T_j=25)	I_{TSM}	100	A
Non repetitive surge peak on-state current (full cycle , t_p=16.6ms , T_j=25)		110	
I^2t value for fusing (t_p=10ms , T_j=25)	I^2t	50	A^2s
Critical rate of rise of on-state current (I_G=2× I			

W
W
kV

Unit
mA
V
V
mA
mA
V/μs
A/ms
μs
V

Unit
V
V
mΩ
μA
mA

Unit

/W R ŧh(j

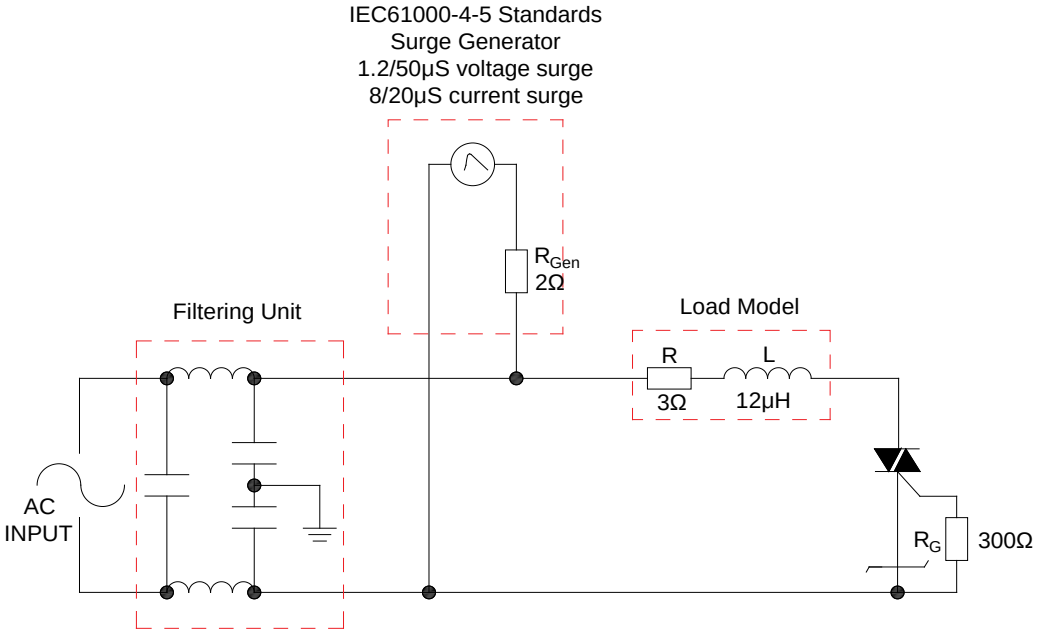
ORDERING INFORMATION

AC J T 10 10 -10 A

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

FIG.2: RMS on-state current versus case temperature 3691215

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



LEAD FORMING AND SOLDERING

Refer to the application note “Assembly Instructions for Thyristors in Through-hole Package” released by JieJie

Microelectronics

ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
ACJT1010-10A	1000	10	TO-220A(Ins)	50	Tube

Document Revision History

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