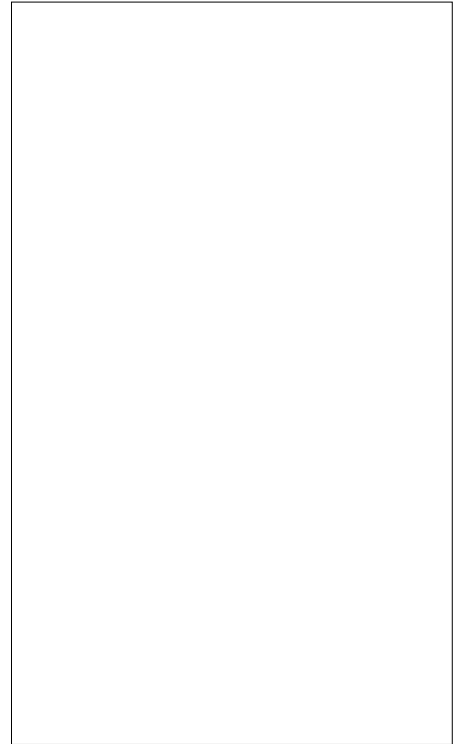




ACJT210-6H 2A TRIAC

Rev.A.1.0

The ACJT210-6H 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 ACJT210-6H 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.



Parameter	Symbol	Value	Unit
Storage junction temperature range	$T_{stg}$	-40-150	°C
Operating junction temperature range	$T_j$	-40-125	°C
Repetitive peak off-state voltage ( $T_j=25^{\circ}C$ )	$V_{DRM}$	600	V
Repetitive peak reverse voltage ( $T_j=25^{\circ}C$ )	$V_{RRM}$	600	V

RMS on

Peak pulse voltage ( $T_j=25^\circ\text{C}$ ; non-repetitive, off-state; FIG.7)	$V_{pp}$	4.5	kV
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( $T_j=25^\circ\text{C}$  unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
$I_{GT}$	$V_D=12\text{V}$ $R_L=33$	I - II -III	MAX.	10	mA
$V_{GT}$		I - II -III	MAX.	1	V
$V_{GD}$	$V_D=V_{DRM}$ $T_j=125^\circ\text{C}$ $R_L=3.3\text{K}$	I - II -III	MIN.	0.2	V
$I_L$	$I_G=1.2I_{GT}$	I -III	MAX.	25	mA
		II		35	
$I_H$	$I_T=100\text{mA}$		MAX.	15	mA
dV/dt	$V_D=400\text{V}$ Gate Open $T_j=125^\circ\text{C}$		MIN.	1000	V s
(dI/dt) <sub>c</sub>	(dV/dt) <sub>c</sub> =1 $T_j=125^\circ\text{C}$		MIN.	3	A/ms
$t_{on}$	$I_G=20\text{mA}$ $I_A=200\text{mA}$ $I_R=20\text{mA}$ $T_j=25^\circ\text{C}$		TYP.	2.5	s
$t_{off}$				25	
$V_{CL}$	$I_{CL}=0.1\text{mA}$ $t_p=1\text{ms}$		MIN.	700	V

Symbol	Parameter		Value(MAX.)	Unit
$V_{TM}$	$I_{TM}=3\text{A}$ $t_p=380$ s	$T_j=25^\circ\text{C}$	1.5	V
$V_{TO}$	Threshold voltage	$T_j=125^\circ\text{C}$	0.79	V
$R_D$	Dynamic resistance	$T_j=125^\circ\text{C}$	242	
$I_{DRM}$	$V_D=V_{DRM}$ $V_R=V_{RRM}$	$T_j=25^\circ\text{C}$	5	A
$I_{RRM}$		$T_j=125^\circ\text{C}$	0.15	mA

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (AC)	6.5	$^\circ\text{C/W}$
$R_{th(j-a)}$	junction to ambient (AC)	145	$^\circ\text{C/W}$

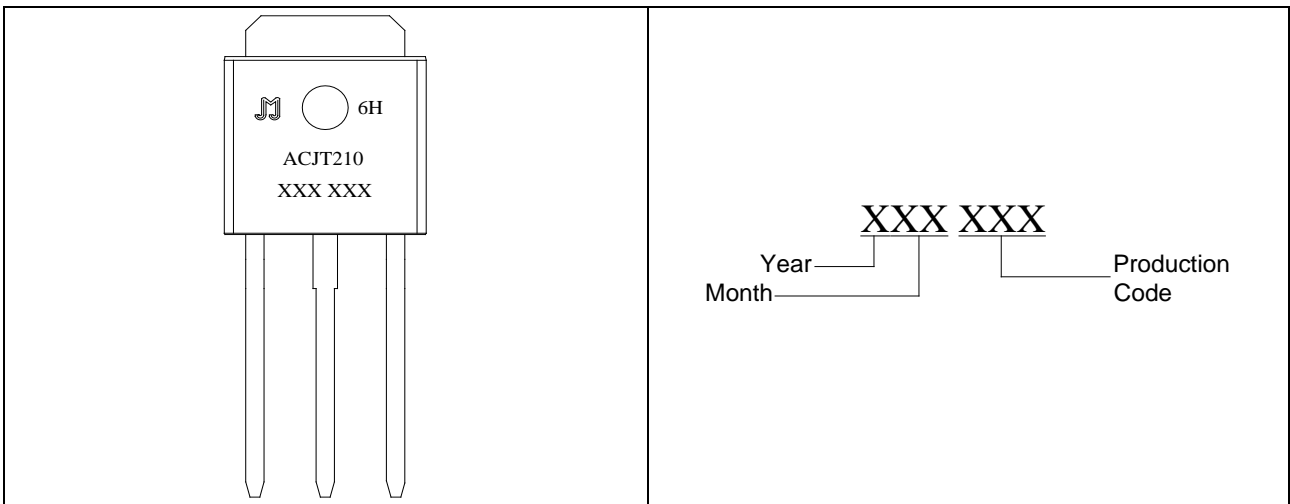
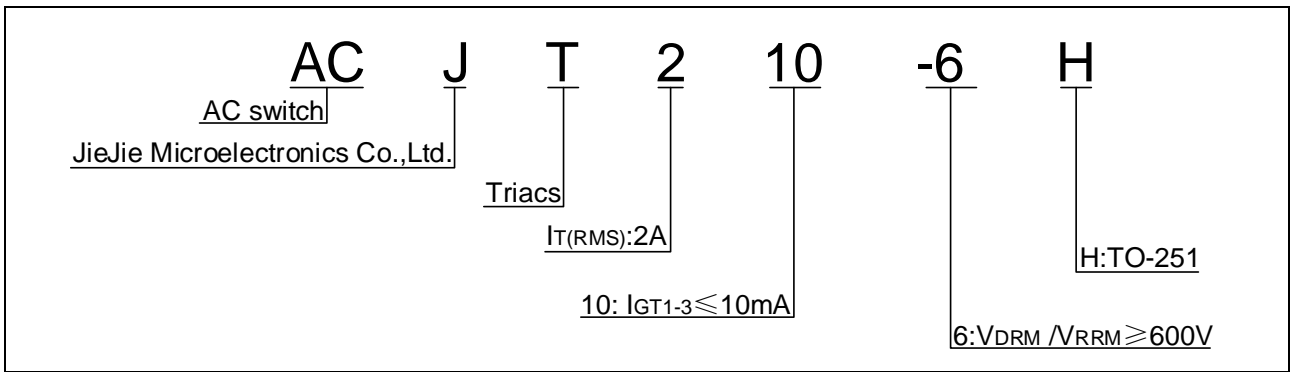
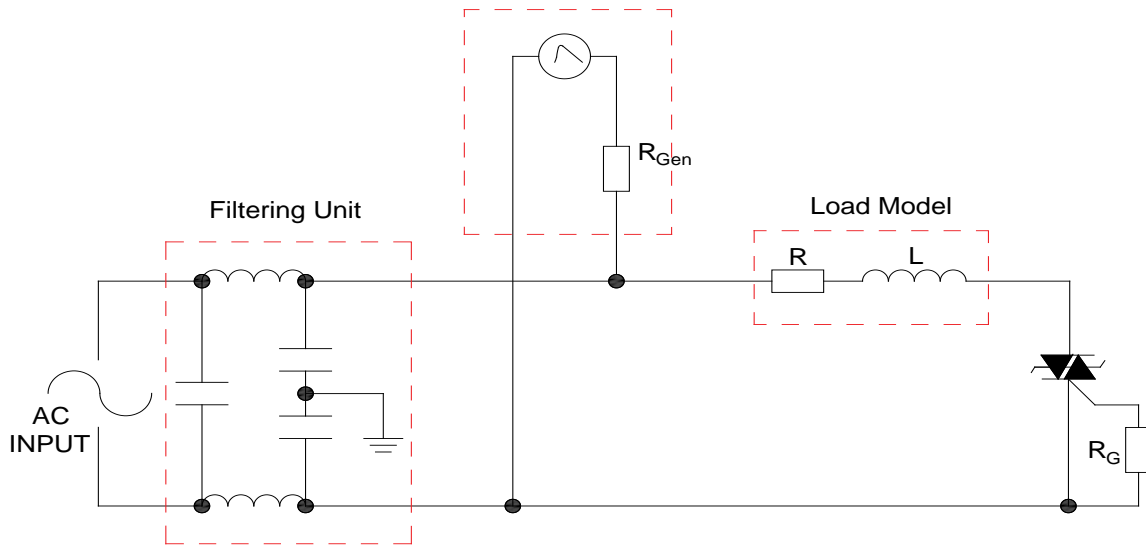




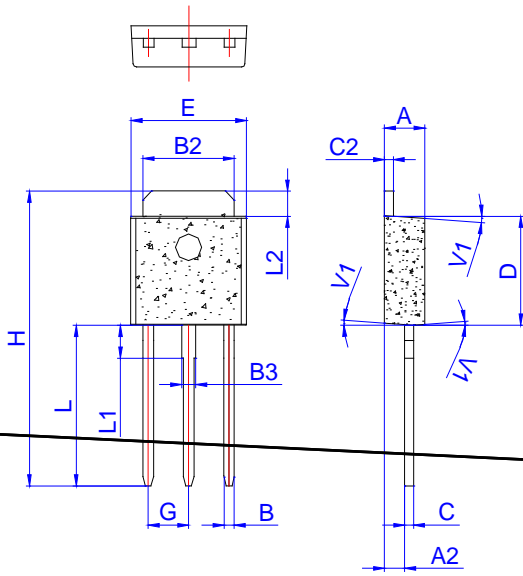
FIG.7: Test circuit for inductive and resistive loads to IEC-61000-4-5 standards

IEC61000-4-5 Standards  
Surge Generator

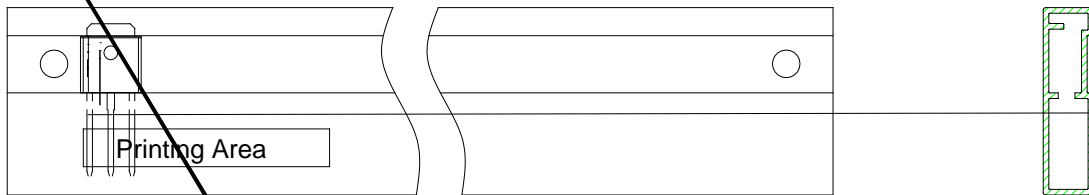


Refer to 《Instructions for installation of plastic-sealed in-line power devices》 released by JieJie

Order code	Voltage $V_{DRM}/V_{RRM}$ (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
ACJT210-6H	600	10	TO-251	80	




Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	2.20		2.40	0.086		0.095
A2	1.00		1.30	0.039		0.051
B	0.50		0.70	0.020		0.028
B2	5.10		5.40	0.200		0.213
B3	0.70		1.00	0.028		0.039
C	0.45		0.62	0.018		0.024
C2	0.48		0.62	0.019		0.024
D	6.00		6.20	0.236		0.244
E	6.40		6.70	0.252		0.264
G	2.20		2.40	0.087		0.094
H	16.0		17.0	0.630		0.669
L	8.90		9.40	0.350		0.370
L1	1.80		2.20	0.071		0.087
L2	1.25		1.55	0.049		0.061
V1		4°			4°	



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