



## TT6061A PRODUCT SPECIFICATION

GENERAL DESCRIPTION :

TT6061A IC IS A KIND OF CMOS TECHNOLOGY PERMITTED TO DESIGN 3 STEPS TOUCH-DIMMER.  
THE DETAILED FUNCTIONS ARE AS FOLLOW :

TT6061A : OFF → NIGHT → MEDIUM → HIGH → OFF

THE TIME THAT TRIAC TURN ON IS AS FOLLOWING FOR EACH STEP OF ALL FUNCTION

3-STEP MODE	NIGHT	MEDIUM	HIGH
AC=110V/60HZ	5.9 ±0.4mS	4.1 ±0.3mS	1.2 ±0.2mS
AC=220V/50HZ	6.9 ±0.4mS	4.8 ±0.3mS	1.4 ±0.2mS

PIN ASSIGNMENT

PIN NO.	PIN NAME	FUNCTION DESCRIPTION	I/O
1	CK	SYSTEM CLOCK INPUT	I
2	FI	60 OR 50 HZ LINE FREQUENCY	I
3	VDD	POWER INPUT PIN FOR VDD	P
4	TI	TOUCH INPUT	B
5	CI	SENSOR CONTROL INPUT	B
6	NC		
7	VSS	POWER INPUT PIN FOR VSS	P
8	AT	ANGLE-TRIGGER OUTPUT	O

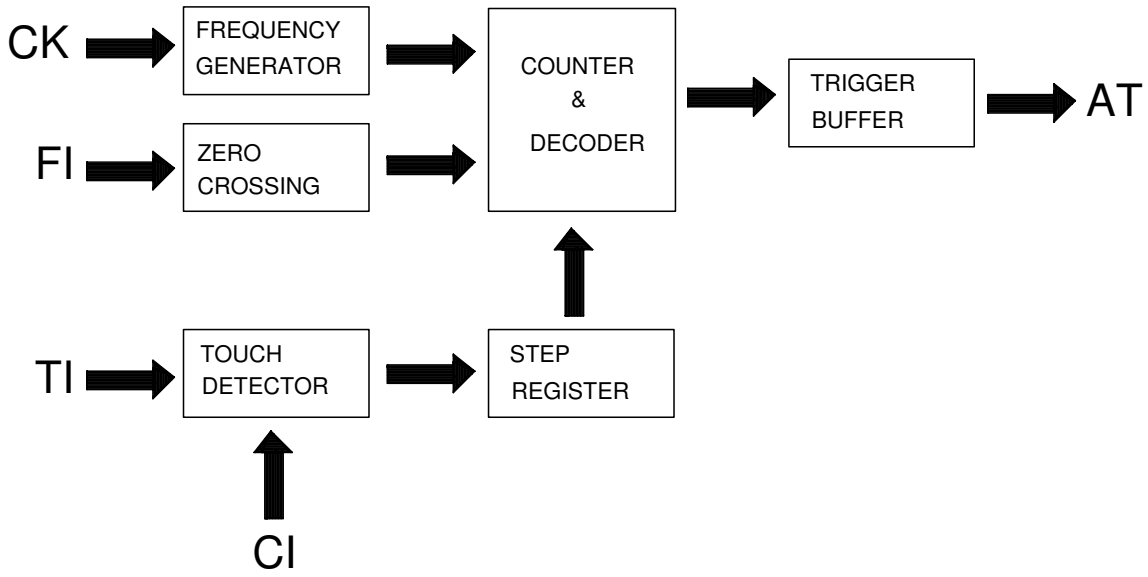
FEATURES :

1. NO MECHANICALLY SWITCH ELEMENTS.
2. HIGH SENSITIVITY AND STABILITY FOR LONG CONNECTING WIRE AND HEAVY LOADING (800pf) ON SENSE-PLATE FOR HUMAN BODY CAPACITY = 50pf
3. VERY SMALL NUMBER OF PERIPHERAL COMPONENTS REQUIRED

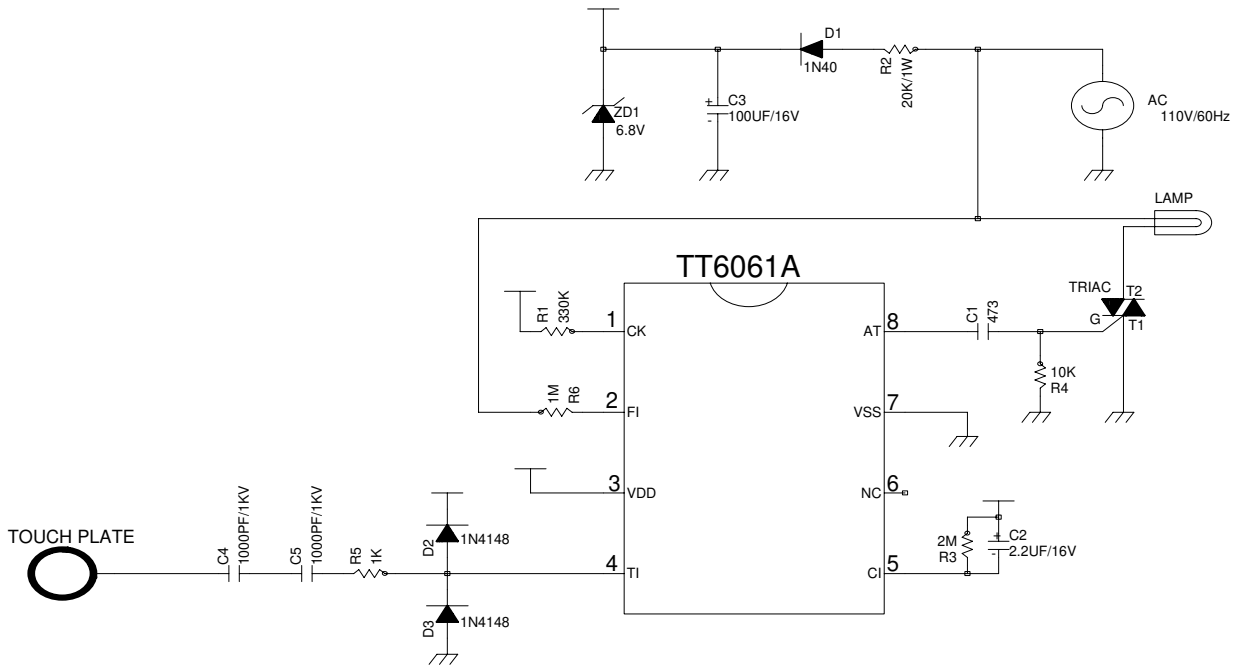
OPERATING PARAMETER :

1. OPERATING VOLTAGE(VDD) : 6.8 V
2. OPERATING CURRENT : ≤ 1.0 mA
3. TRIGGER OUTPUT CURRENT (AT PIN) : ≤ -30 mA (Vout=1.0V)
4. INPUT LEAKAGE : ≤ 0.5 uA
5. VOLTAGE INPUT RANGE : (VSS - 0.3V) <-> (VDD + 0.3V)
6. OPERATING TEMPERATURE : 0°C ~ 80°C
7. STORAGE TEMPERATURE : -20°C ~ 120°C

TT6061A BLOCK DIAGRAM

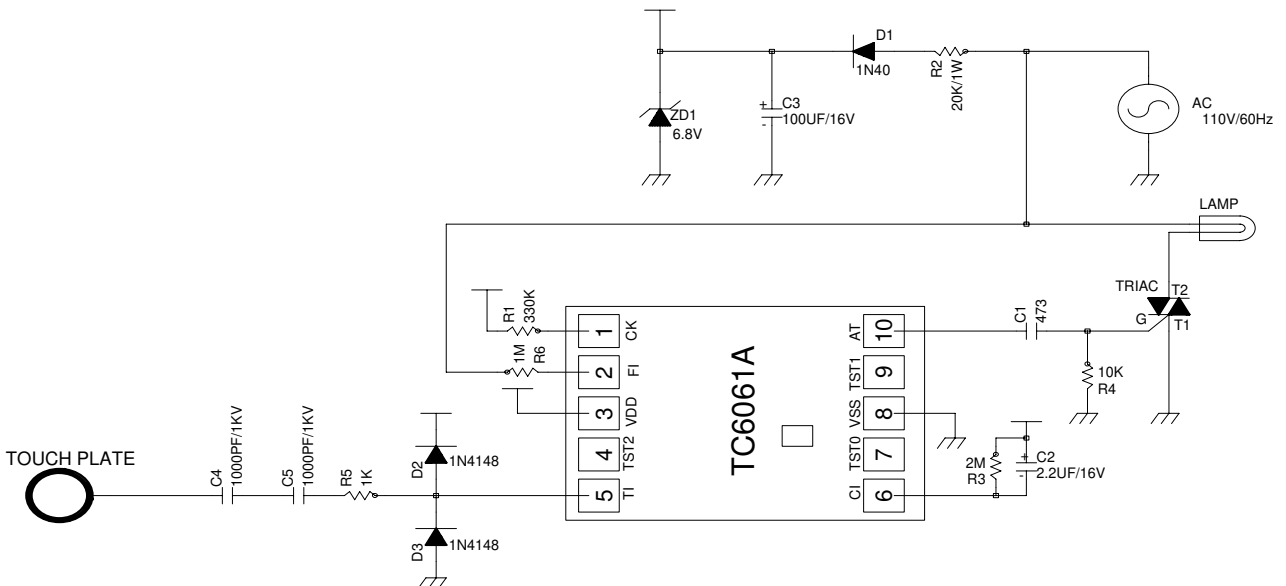


TT6061A RECOMMEND APPLICATION DIAGRAM



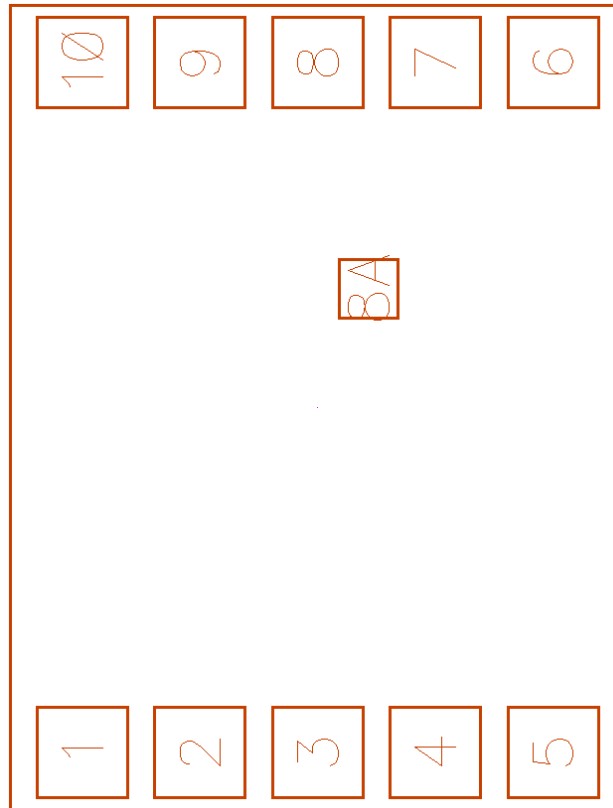
NOTE : FOR 220V/50HZ :  
 CHANGE R1 330K TO 390K ( FOR 60HZ CHANGE TO 50HZ )  
 CHANGE R2 20K/1W TO 39K/2W ( FOR 110V CHANGE TO 220V )  
 CHANGE R6 1M TO 2M ( FOR 110V CHANGE TO 220V )

TC6061A RECOMMEND APPLICATION DIAGRAM



NOTE : FOR 220V/50HZ :  
 CHANGE R1 330K TO 390K ( FOR 60HZ CHANGE TO 50HZ )  
 CHANGE R2 20K/1W TO 39K/2W ( FOR 110V CHANGE TO 220V )  
 CHANGE R6 1M TO 2M ( FOR 110V CHANGE TO 220V )

TC6061A Pad diagram and coordinate



CHIP SIZE = 690um X 880um

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*****
PIN   PIN
NO.   NAME      X=         Y=
*****
1     CK         X=  -244.00 Y=  -343.30
2     FI         X=  -122.00 Y=  -343.30
3     VDD        X=    0.00 Y=  -343.30
4     TST2       X=   122.00 Y=  -343.30
5     TI         X=   244.00 Y=  -343.30
6     CI         X=   244.00 Y=   343.25
7     TST0       X=   122.00 Y=   343.25
8     VSS        X=    0.00 Y=   343.25
9     TST1       X=  -122.00 Y=   343.25
10    AT         X=  -244.00 Y=   343.25
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**ORDER INFORMATION**

- a. Package form: TT6061A
- b. Chip form: TC6061A
- c. Wafer base: TD6061A

**REVISE HISTORY**

- 1. 2009/03/13  
-Original version : V\_1.0