



## Description

PT2127A is a high performance electronic fan controller LSI. Speed control, off-timer, rhythm wind, sleep mode, head swing and/or light control are all built into a single chip. Indicator LED output, buzzer output and key control input are also provided to build a full function electronic fan having the highest performance with the least external components. Furthermore, the pin assignments and application circuit of PT2127A are optimized for easy PCB layout and cost saving for electronic fan application.

## Features

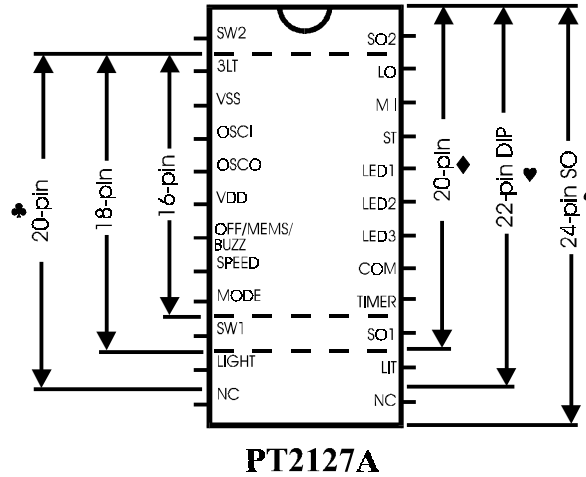
- High Performance CMOS Technology
- Low Power Consumption
- DIP or SO package (22 pin SO not available)
- Up to 3 Dependent/Independent Swing-Head/Light Output
- Available in 16, 18, 20, 22, 24 Pin Package for None, One Set or Two Sets of Swing-Head and/or Light Control
- 90 Seconds Cycle/6 Seconds per Step (Off Step 3 Seconds) Rhythm Wind Pattern
- Optional Independent Light Control Output
- Four Operation Modes: Ordinary, Rhythm, Ordinary Sleep and Rhythm Sleep
- Memory Start-up Mode*
- 3 or 4 Levels Timer
- 2~3 Seconds Middle Wind Start-up (Mask Option)

## Applications

- Optimized for fan application
  - Suitable for heater fan
  - Cooling fan
  - Other home appliances with timer and/or output level control
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## Pin Configuration



## Ordering Information

PT2127A-XXXX

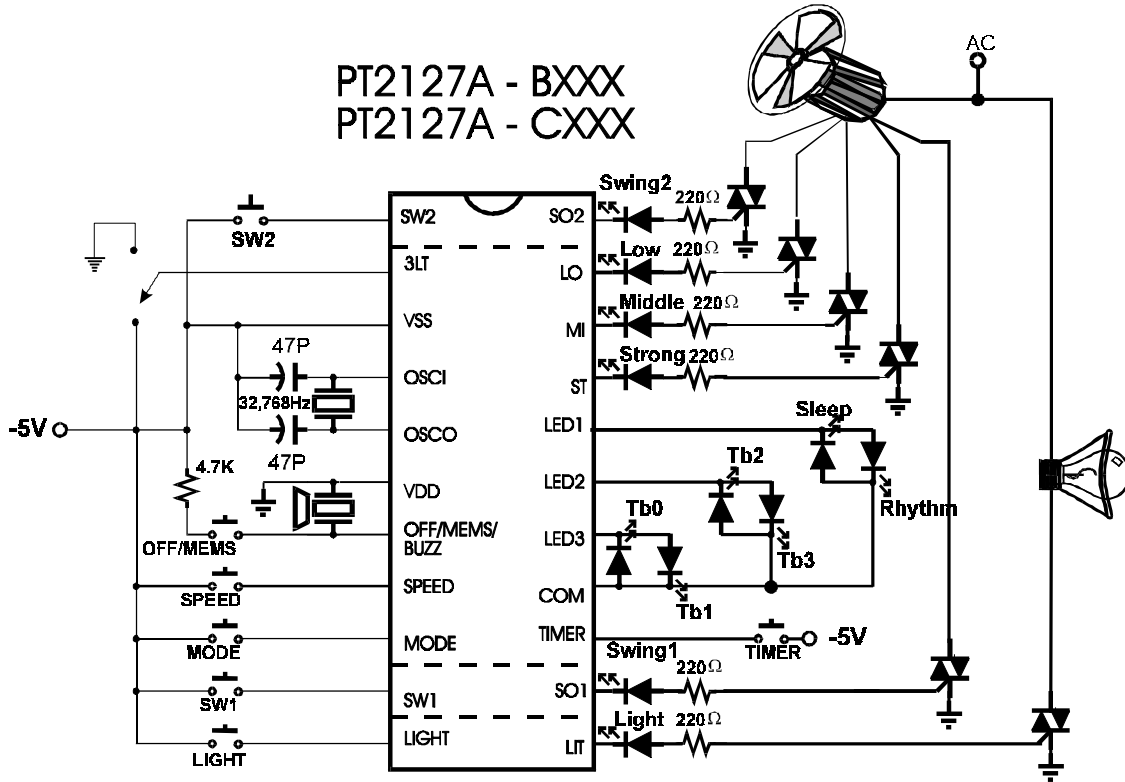
- S = Swing Head Output(s) Controlled by a Single Key (Mask Option)
- D = Two Swing Head Outputs Controlled by Double Keys (D can be omitted)
- 0 = No Swing Head Output
- 1 = 1 Swing Head Output
- 2 = 2 Swing Head Outputs
- 3 = 1 Swing Head & Light Control Outputs
- 4 = 2 Swing Head & Light Control Outputs
- 4 = 0.5/1/2/4 Hour, Non-Accumulated Timer
- 5 = 0.5/1/2/4 Hour, Accumulated Timer
- 8 = 1/2/4/8 (or 1/2/4 if 3LT = high) Hour, Non-Accumulated Timer
- 9 = 1/2/4/8 (or 1/2/4 if 3LT = high) Hour, Accumulated Timer
- B = Non-Memory Start-up & Non-Middle Wind Start-up (Mask Option)
- C = Non-Memory Start-up & Middle Wind Start-up
- L = Memory Start-up & Non-Middle Wind Start-up (Mask Option)
- M = Memory Start-up & Middle Wind Start-up

Note: PT2127A Standard ICs: PT2127A-C80, PT2127A-C81, PT2127A-C82, other options are available upon request and require a minimum order quantity. Please contact PTC for details.



# Application Circuits

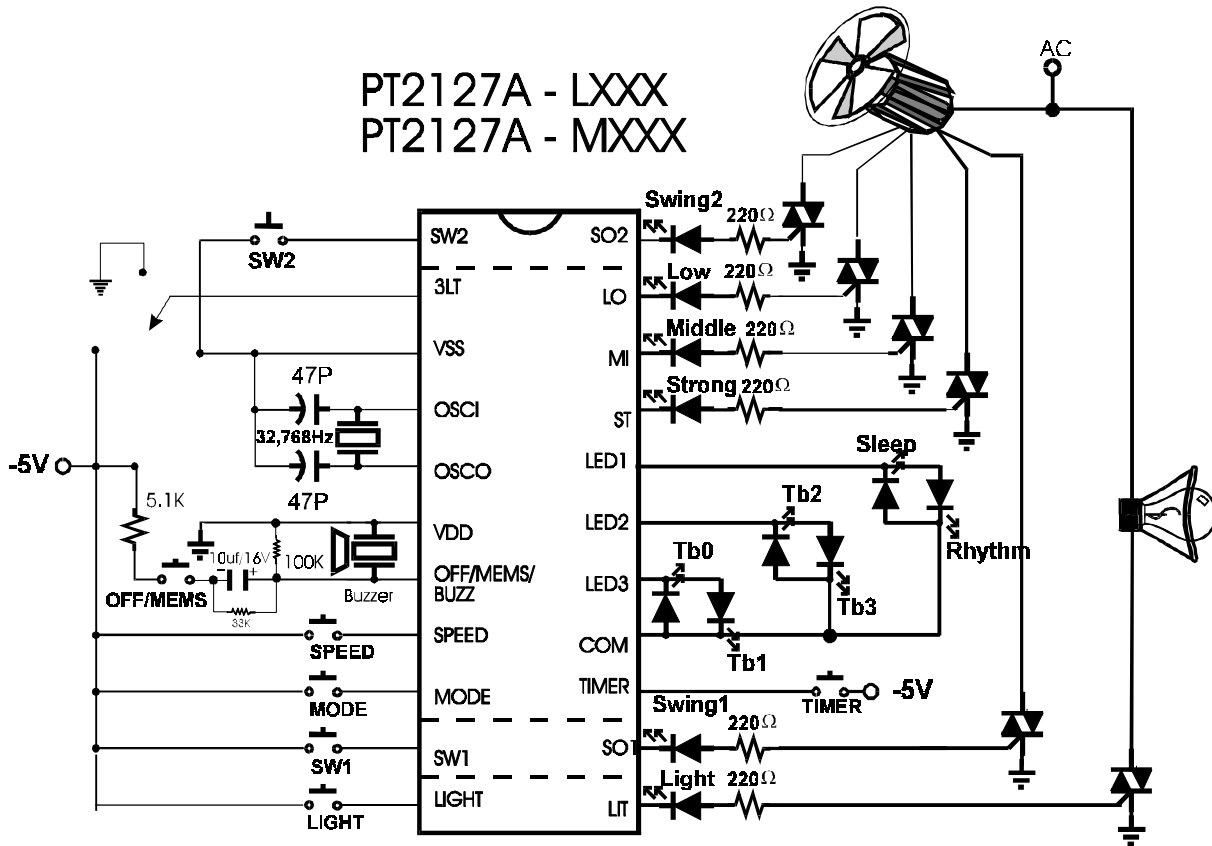
## IC Non-Memory Start-Up



Note: Swing Head 1 = Controlled by SW1  
 Swing Head 2 = Controlled by SW2  
 3 Level Timer : 3LT Pin Pulled High  
 4 Level Timer : 3LT Pin Pulled Low



### Memory Start- Up



Note: Swing Head 1 = Controlled by SW1  
 Swing Head 2 = Controlled by SW2  
 3 Level Timer : 3LT Pin Pulled High  
 4 Level Timer : 3LT Pin Pulled Low