

GENERAL DESCRIPTION

C1937 is a CMOS integrated circuit which is 2-function clock with alarm and snooze function and can drive a 3.5-digit duplexed liquid crystal display with Colon, PM-Time and Snooze Mark. This chip provides an variable alarm sound with crescendo.

FUNCTIONS

- Single 1.5V battery operation.
- 32,768Hz crystal frequency.
- 2-Functions : Hour and Minute.
- 60-second alarm autostop.
- Snooze function.
- Drives 3.5-digit duplexed LCD with PM, Alarm and Snooze mark.
- Colon display flash or freeze available.
- Direct drive of piezoelectric transducer.

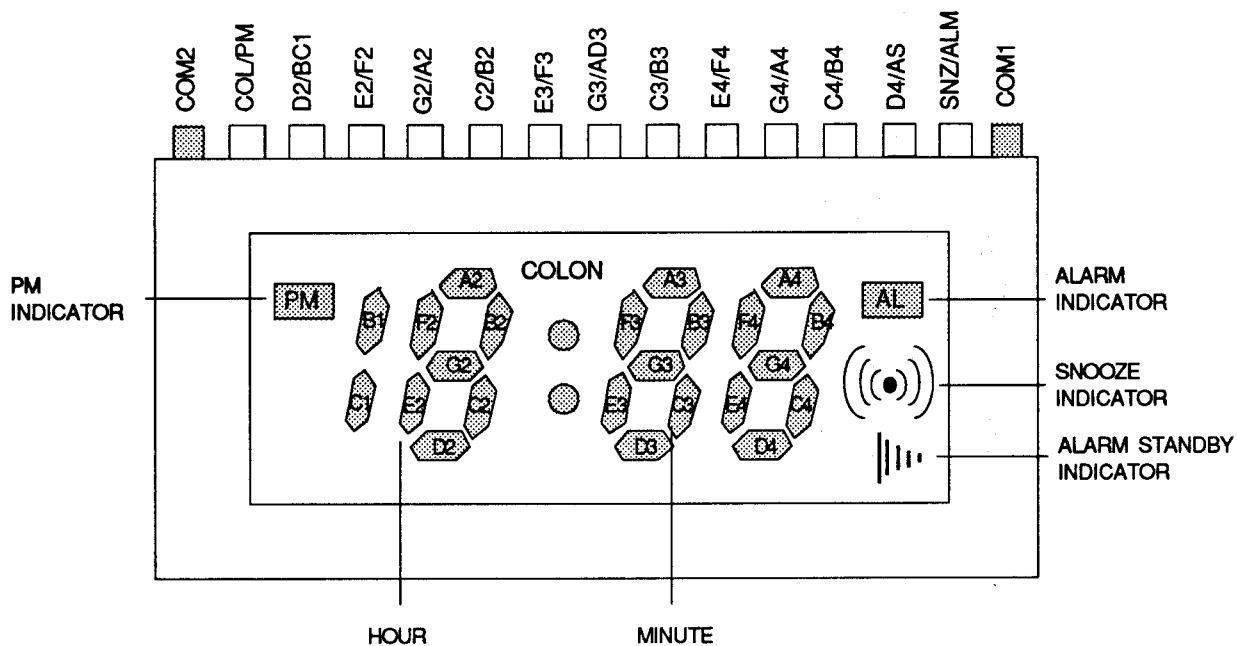
FEATURES

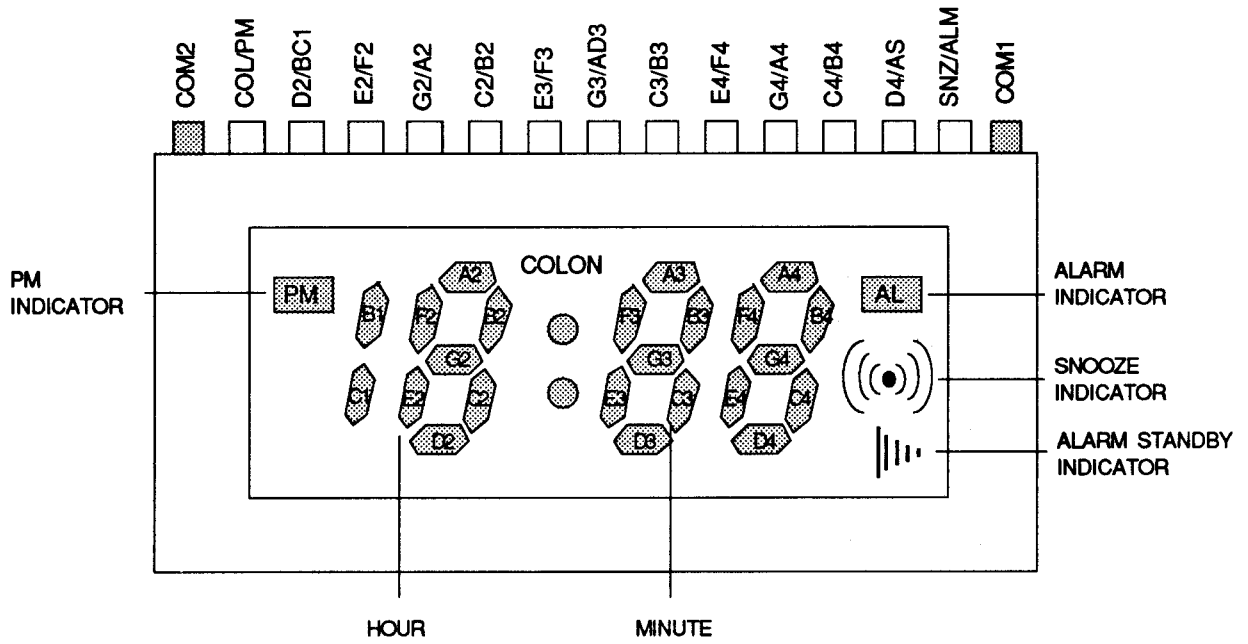
- Single-chip CMOS construction.
- Alarm enable/disable.
- Alarm tone 4 step variable with crescendo.
- Alarm Sound Demonstration Capability.
- 7 operational switches (with pull-down resistors).
- Built-in chip oscillator, capacitor, resistor and voltage doubler.

3.5-DIGIT LCD FORMAT

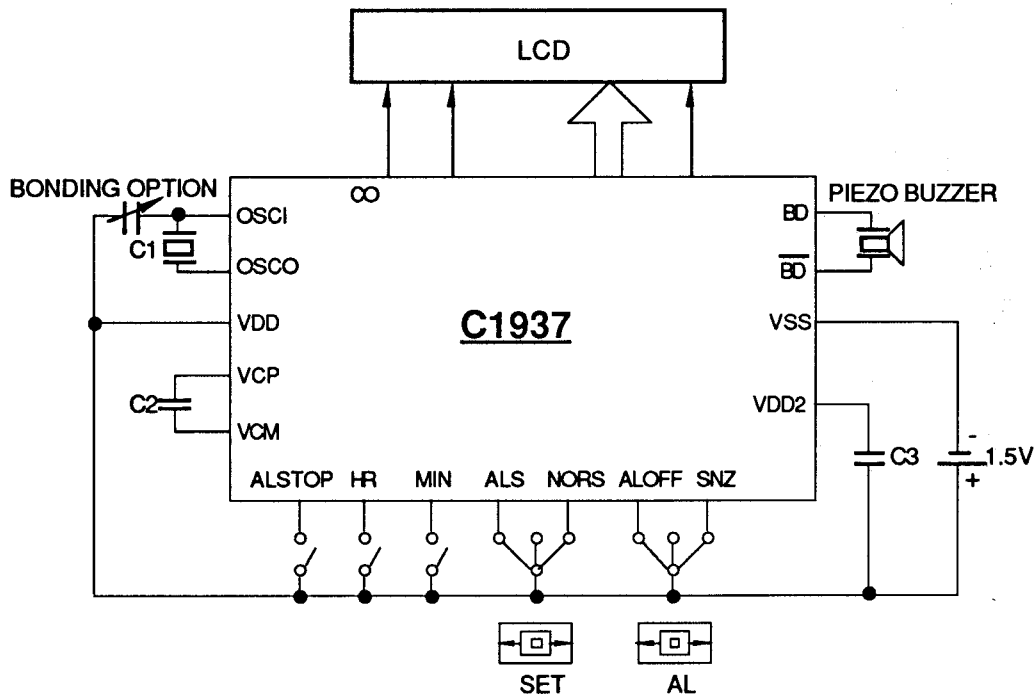
| PIN | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|------|------|------|-----|-----|----|----|----|----|
| COM1 | COM1 | | COL | D2 | E2 | G2 | C2 | E3 |
| COM2 | | COM2 | PM | BC1 | F2 | A2 | B2 | F3 |

| PIN | 9 | 10 | 11 | 12 | 13 | 14 | 15 | |
|------|-----|----|----|----|----|----|-----|--|
| COM1 | G3 | C3 | E4 | G4 | C4 | D4 | SNZ | |
| COM2 | AD3 | B3 | F4 | A4 | B4 | AS | ALM | |





APPLICATION DIAGRAM



- Note:**
1. C1 = 5 - 35 pF
C2 = C3 = 0.1 μF
 2. Substrate should be connected to VSS

PAD DIAGRAM

