

Six Functions Six Digit Alarm Watch

C1926

With EL Back Light Control

GENERAL DESCRIPTION

C1926 is a CMOS digital 6-function watch integrated circuit with alarm, autoranging chronograph function and EL Back light control; designed to for a 6-digit duplexed liquid crystal display, 7-day mark, date mark, AM/PM mark and colon.

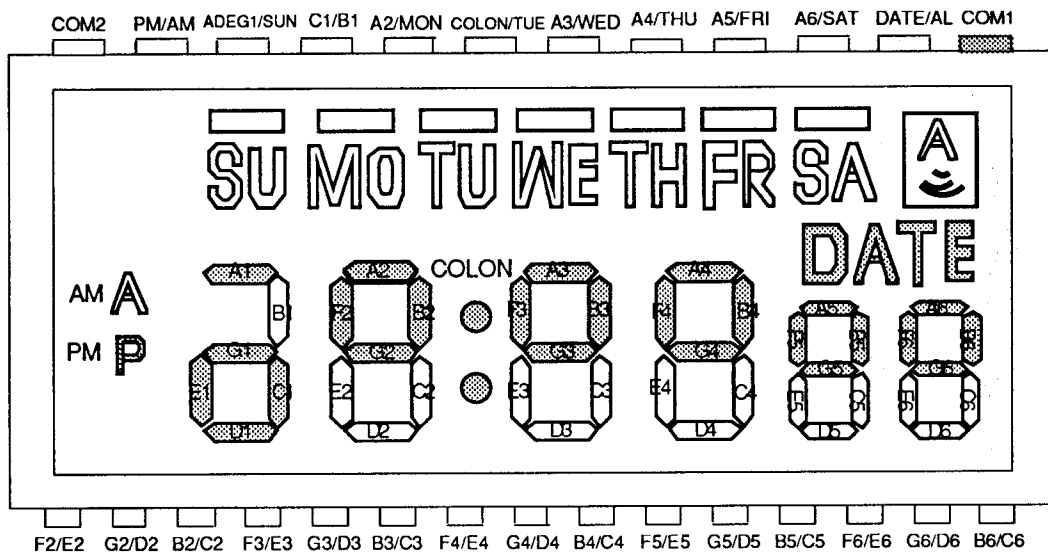
FUNCTIONS

- 6 Functions: Month, Date, Day-of-Week, Hour, Minute, Second.
- EL Back light control with 3 second delay.
- 6-digit Chronograph: Autoranging after 30 minutes to hour, minute; second.
- User selectable 12-hour/24-hour format.
- Alarm output for melody IC.
- 4-year calendar.
- One-touch correction of time error within +/-30 seconds.
- Fast advance for time and alarm time set.
- Chime on every hour.
- 3-switch sequential operation.
- LCD test.

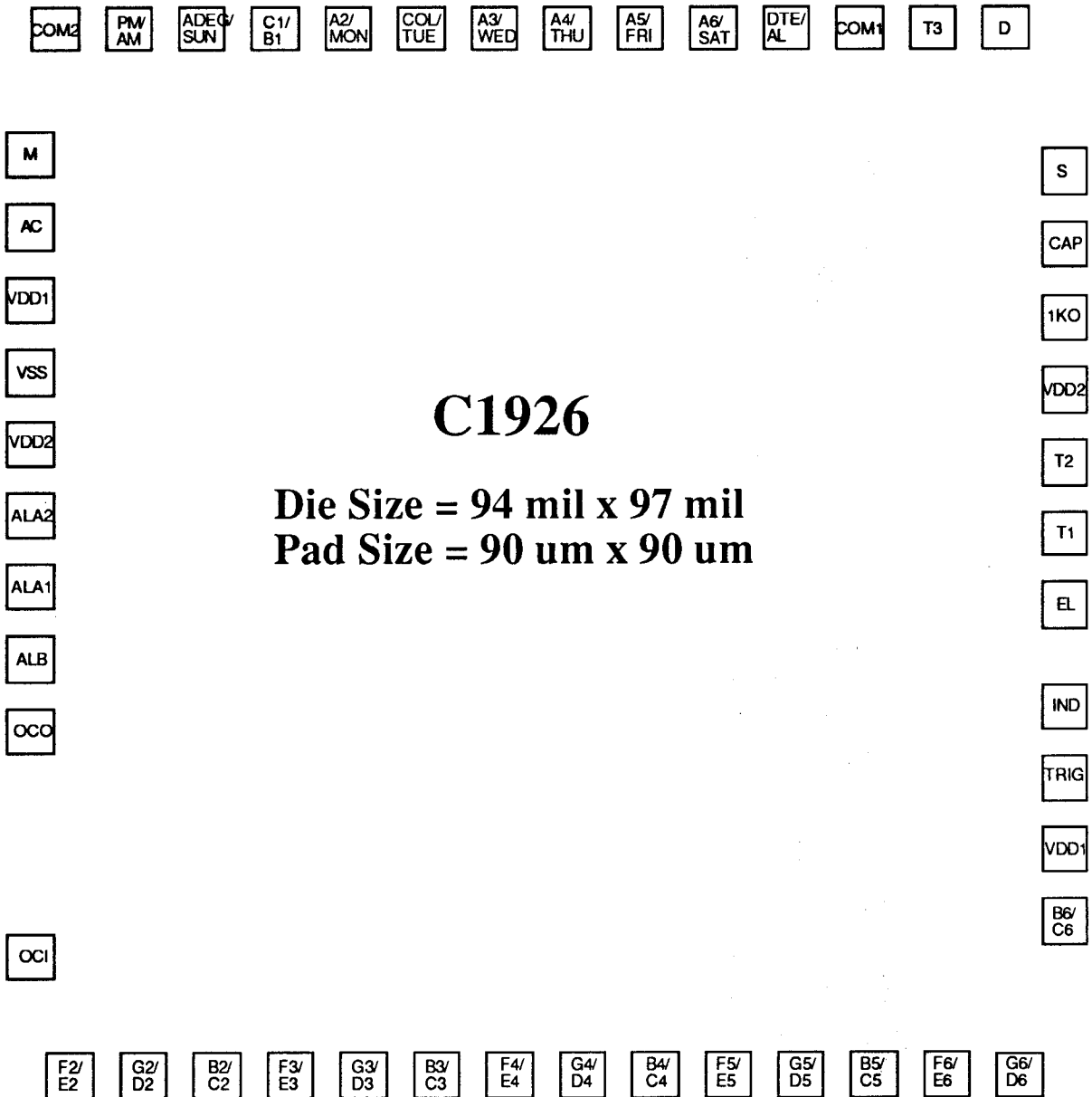
FEATURES

- Single battery operation (1.2-1.8V).
- 32,768Hz crystal frequency.
- Single-chip CMOS construction and low power dissipation.
- On chip voltage doubler transducer.
- Drives 6-digit duplexed LCD with 7-day mark, AM/PM mark, date mark and alarm mark.
- Built-in EL Back light control circuit.
- Direct drive of piezoelectric transducer.
- Debounce circuitry on switch inputs.

LCD FORMAT



PAD DIAGRAM



NOTE:

1. Substrate is connector to VSS.
2. In C1926 pad diagram, there are tow VDD1 and two VDD2 pads. Two VDD1 pads should be connected together during PCB layout. Two VDD2 also should be connected together on PCB.

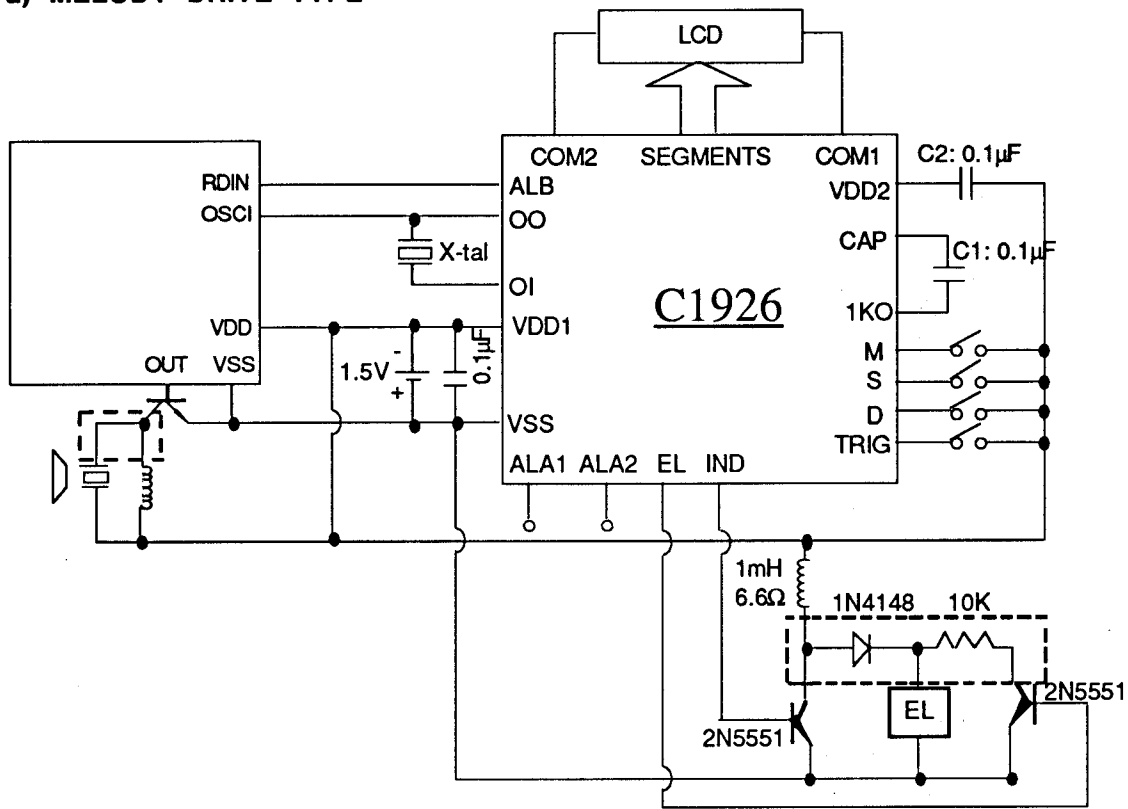
DC ELECTRICAL CHARACTERISTICS

(T2 = 25°C, Vss = 0V, VDD = 1.5V unless otherwise specified.)

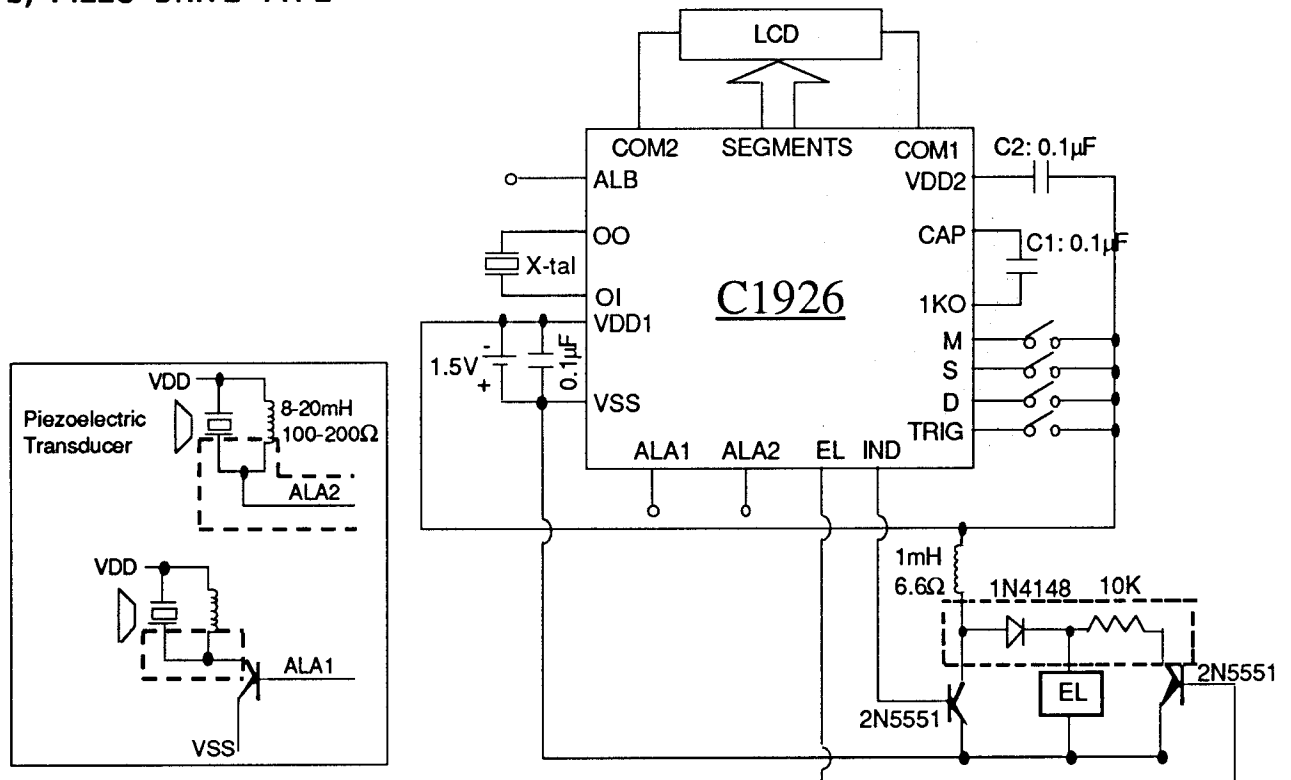
Characteristics	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Operating Voltage	VDD1	1.2	1.5	1.8	V	-
	VDD2	2.4	3.0	3.6	V	-
Supply Current	IDD	-	1.0	2.5	μA	Without load

APPLICATION CIRCUIT

a) MELODY DRIVE TYPE



b) PIEZO DRIVE TYPE



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