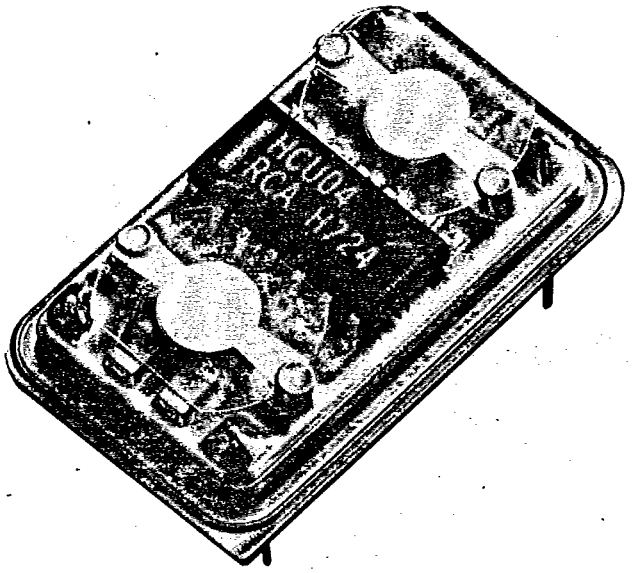
T-50-23

Pletronics

DUAL OUTPUT HYBRID CLOCK OSCILLATOR



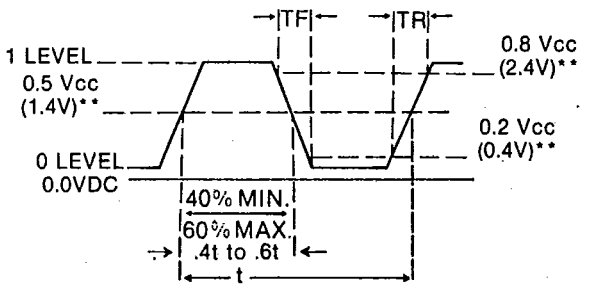
DESCRIPTION

The PLETRONICS Dual Output Hybrid Clock Oscillator has been designed to provide two distinct frequencies from two independent quartz crystals mounted in a standard 14 pin metal DIP. Six models are available, depending on desired overall frequency stability, with the following beneficial features:

- Two independent outputs from 4 MHz to 60 MHz
- High speed CMOS output with full TTL compatibility
- Saves board space
- Can cost less than two single output clock oscillators
- Saves purchasing, inventory, and assembly costs

PERFORMANCE SPECIFICATIONS

- Frequency Range:
  Two independent outputs, each selectable from 4 MHz to 60 MHz
- Temperature Range:
  Operating: 0° to 70°C
  Storage: –55° to 125°C
- Overall Frequency Stability:
  ±0.0025% to ±1.0%
  (dependent on model — see Table 1)
- Input Voltage (Vcc):
  5 VDC ±10% standard
- Input Current:
  10 to 40 mA
  (dependent on crystal frequency and load)
- Output Load:
  HC test load: 50 pF
  TTL test load: 3 TTL loads +20 pF
- Output Symmetry:
  60/40 to 40/60
- Rise and Fall Times:
  6 nS max. with 3 TTL test loads +20 pF



"0" Level = 0.1 Vcc (0.4V)** max.
"1" Level = 0.9 Vcc (2.4V)** min.
"0" Sink Current = 5 mA
"1" Source Current = 400 μA

** specifications when used as TTL clock

Pletronics, Inc. • 9026 Roosevelt Way N.E. • Seattle, WA 98115
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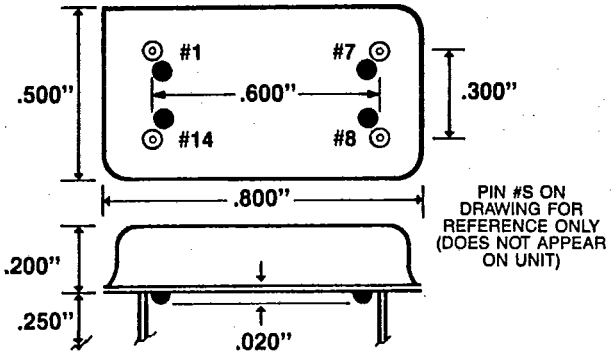
DUAL FREQUENCY SERIES	
Model	0° to 70° C Overall Frequency Stability
DF1144	±.0025%
DF1145	± .005%
DF1100	± 0.01%
DF1114	± 0.05%
DF1115	± 0.1%
DF1116	± 1.0%

Table 1



Four Glass Bead Stand-offs

CONNECTION	
*1	Output
7	Circuit/Case Ground
*8	Output
14	Input (Vcc)

Table 2

*Separate return required from each output.

MECHANICAL SPECIFICATIONS

- Seal:
  Resistance weld
- Seal Strength:
  20 lbs. maximum force perpendicular top to bottom
- Gross Leak Test:
  100% leak tested
- Pins:
  Nickel plated and solder dipped for extra corrosion protection
- Bend Test:
  Pins will withstand two bends of 90° reference to base
- Marking Ink:
  Heat cured epoxy: Solvent resistant

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