

CFPP-620 FAST MAKE OSCILLATORS

ISSUE 5; 1 NOVEMBER 2010 - RoHS 2002/95/EC

Description

- PLL based, one time only factory programmable for a fast lead time
- Crystal oscillator in a hermetically sealed ceramic package with a metal lid
- See IQXO-690 for standard crystal oscillator alternative
- See IQMS-900 series for MEMS oscillator alternative

Frequency Range

- 200 to 700MHz

Output Compatibility & Load

- LVPECL
- Output Load 50Ω terminated to $V_S - 2.0V$
- Output Voltage V_{OH} ($V_S - 1.025V$)
- Output Voltage V_{OL} ($V_S - 1.62V$)

Supply Voltage

- 3.3V

Standard Frequency Stability

- $\pm 25ppm$

Operating Temperature Range

- -40 to $85^\circ C$

Storage Temperature Range

- -55 to $125^\circ C$

Tri-state Operation (CMOS)

- Logic '1' to pad 1 enables oscillator output
- Logic '0' to pad 1 disables oscillator output; when disabled the oscillator output goes to the high impedance state
- No connection to pad 1 enables the oscillator output

Period Jitter

- 10ps rms typ

Ageing

- $\pm 5ppm$ max in 1st year @ $25^\circ C$, $V_S = 3.3V$

Packaging

- Loose in bulk pack, 1pc per bag
- Tape and reel in accordance with EIA-481-D, 1kpcs per reel (please see pages 372 & 373)

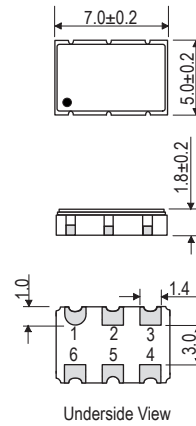
Ordering Information (*minimum required)

- Frequency*
- Model*
- Output Compatibility
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Supply Voltage

Example

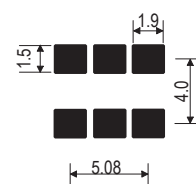
- 20.00MHz CFPP-620
LVPECL $\pm 25ppm$ -40 to $85^\circ C$ 3.3V

Outline (mm)

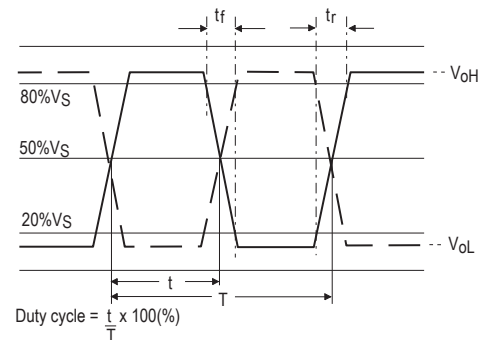


- Pad Connections
1. Tri-State (CMOS)
 2. Do Not Connect
 3. GND
 4. LVPECL +
 5. LVPECL -
 6. + V_S

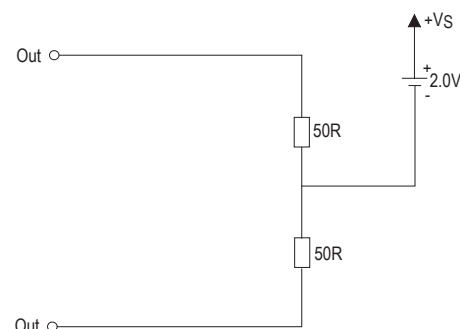
Solder Pad Layout



Output Waveform



Test Circuit





Electrical Specifications - maximum limiting values

Frequency Range	Frequency Stability	Supply Voltage	Supply Current	Rise Time (tr) (20-80%)	Fall Time (tf) (80-20%)	Duty Cycle	Model Number
200.0 to 700.0MHz	±25ppm	3.3V ±5%	130mA	1.5ns	1.5ns	45/55%	CFPP-620

Note: For other frequency/specification combinations, please contact our sales offices

