

Features

- LVPECL Output
- Stabilities to ± 20 PPM
- Temperature Ranges -40°C to $+85^{\circ}\text{C}$
- Supply Voltages: 2.5V, 3.3V

| 2.5V ELECTRICAL CHARACTERISTICS | |
|----------------------------------|---|
| PARAMETERS | MAX (Unless otherwise noted) |
| Frequency Range | 40.000 ~ 325.000 MHz |
| Temperature Range | |
| Storage (T_{STG}) | $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$ |
| Supply Voltage (V_{DD}) | $2.5\text{V} \pm 10\%$ |
| Input Current (I_{DD}) | 88mA |
| Standby Current | 30 μA |
| Output Symmetry (50% V_{DD}) | |
| 40.000 ~ 170.000 MHz | 45% ~ 55% |
| >170.000 ~ 325.000 MHz | 40% ~ 60% |
| Rise Time (20%~80% V_{P-P}) | 1nS |
| Fall Time (80%~20% V_{P-P}) | 1nS |
| Output Voltage (V_{OL}) | 1.195V |
| (V_{OH}) | 1.415V Min. |
| Output Load (HCMOS) | 50 Ohms to $V_{DD} - 2.0\text{V}$ |
| Start-up Time (T_S) | 10 mS |
| Output Disable Time ¹ | 200 nS |
| Output Enable Time ¹ | 10 mS |
| Phase Jitter (12kHz~20MHz BW) | 0.3pS Typ. |

| ENABLE / DISABLE FUNCTION | |
|------------------------------------|------------------------------|
| Pin ¹ | Out 1 (pin 4), Out 2 (pin 5) |
| OPEN ¹ | Active |
| '1' Level $V_{IH} \geq 70\%V_{DD}$ | Active |
| '0' Level $V_{IL} \leq 30\%V_{DD}$ | High Z |

| Available Options by Stability & Operating Temp for 2.5V ² | | |
|---|--|-----------------------|
| Frequency Stability ² | Operating Temperature ($^{\circ}\text{C}$) | Frequency Range (MHz) |
| $\pm 100\text{PPM}$ | $-10 \sim +70$ | 40.000 ~ 325.000 |
| $\pm 100\text{PPM}$ | $-20 \sim +70$ | 40.000 ~ 325.000 |
| $\pm 100\text{PPM}$ | $-40 \sim +85$ | 40.000 ~ 325.000 |
| $\pm 50\text{PPM}$ | $-10 \sim +70$ | 40.000 ~ 325.000 |
| $\pm 50\text{PPM}$ | $-20 \sim +70$ | 40.000 ~ 325.000 |
| $\pm 50\text{PPM}$ | $-40 \sim +85$ | 40.000 ~ 325.000 |
| $\pm 25\text{PPM}$ | $-10 \sim +70$ | 40.000 ~ 325.000 |
| $\pm 25\text{PPM}$ | $-20 \sim +70$ | 40.000 ~ 325.000 |
| $\pm 25\text{PPM}$ | $-40 \sim +85$ | 40.000 ~ 200.000 |

¹ An internal pull-up resistor from pin 1 to pin 4 allows active output if pin 1 is left open

² Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, Shock, vibration, reflow, and one-year aging. (*Excludes shock and vibration)

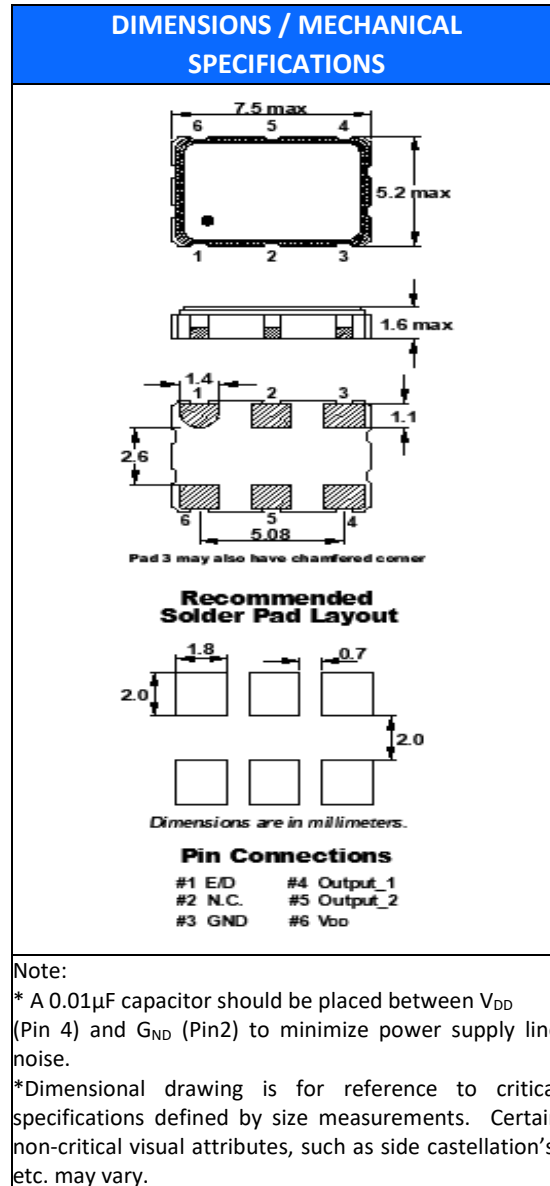
| 3.3V ELECTRICAL CHARACTERISTICS | |
|--|------------------------------|
| PARAMETERS | MAX (Unless otherwise noted) |
| Frequency Range | 40.000 ~325.000 MHz |
| Temperature Range | |
| Storage (T _{STG}) | -55°C ~ +125°C |
| Supply Voltage (V _{DD}) | 3.3V±10% |
| Input Current (I _{DD}) | 88mA |
| Standby Current | 30 µA |
| Output Symmetry (50% V _{DD}) | |
| 40.000 ~ 170.000 MHz | 45% ~ 55% |
| >170.000 ~ 325.000 MHz | 40 % ~ 60 % |
| Rise Time (20%~80% V _{P-P}) | 1nS |
| Fall Time (80%~20% V _{P-P}) | 1nS |
| Output Voltage (V _{OL}) | 1.7V |
| (V _{OH}) | 2.2V Min. |
| Output Load (HCMOS) | 50 Ohms to VDD – 2.0V |
| Start-up Time (T _S) | 10 mS |
| Output Disable Time ¹ | 100 nS |
| Output Enable Time ¹ | 10 mS |
| Phase Jitter (12kHz~20MHz BW) | 0.3pS Typ. |

| ENABLE / DISABLE FUNCTION | |
|--|------------------------------|
| Pin ² | Out 1 (pin 4), Out 2 (pin 5) |
| OPEN ¹ | Active |
| '1' Level V _{IH} ≥ 70%V _{DD} | Active |
| '0' Level V _{IL} ≤ 30%V _{DD} | High Z |

| Available Options by Stability & Operating Temp for 3.3V ² | | |
|---|----------------------------|-----------------------|
| Frequency Stability ² | Operating Temperature (°C) | Frequency Range (MHz) |
| ±100PPM | -10 ~ +70 | 40.000 ~ 325.000 |
| ±100PPM | -20 ~ +70 | 40.000 ~ 325.000 |
| ±100PPM | -40 ~ +85 | 40.000 ~ 325.000 |
| ±50PPM | -10 ~ +70 | 40.000 ~ 325.000 |
| ±50PPM | -20 ~ +70 | 40.000 ~ 325.000 |
| ±50PPM | -40 ~ +85 | 40.000 ~ 325.000 |
| ±25PPM | -10 ~ +70* | 40.000 ~ 325.000 |
| ±25PPM | -20 ~ +70* | 40.000 ~ 325.000 |
| ±25PPM | -40 ~ +85* | 40.000 ~ 280.000 |
| ±20PPM | -10 ~ +70* | 40.000 ~ 280.000 |
| ±20PPM | -20 ~ +70* | 40.000 ~ 280.000 |

¹ An internal pull-up resistor from pin 2 to pin 6 allows active output if pin 1 is left open

² Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, Shock, vibration. (*Excludes shock and vibration)



| STANDARD SPECIFICATIONS | |
|--|------------------------------|
| PARAMETERS | MAX (Unless otherwise noted) |
| Maximum Soldering Temp / Time | 260°C / 10 Seconds x 2 |
| Moisture Sensitivity Level (MSL) | 1 |
| Termination Finish | Au over Ni |
| Seal Method | Seam |
| Lead (Pb) Free | Yes |
| RoHS /REACH Compliant (latest version) | Yes |

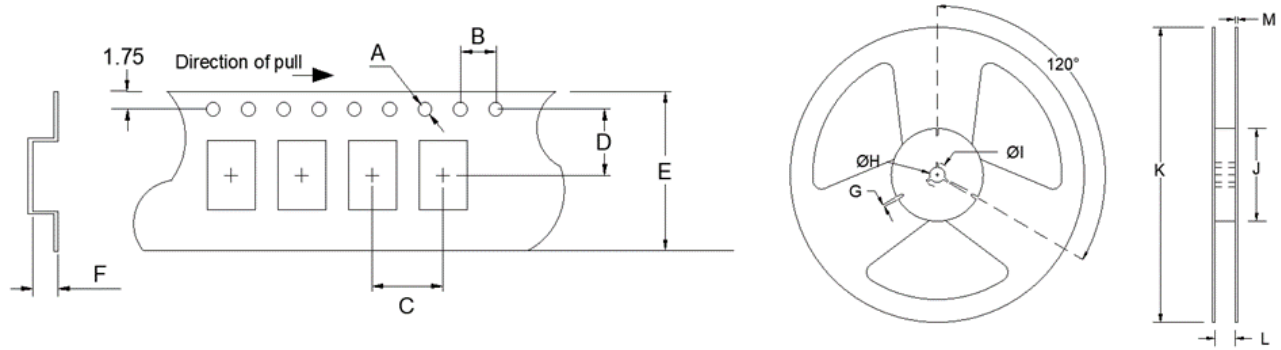
FO7PS

(Former F4600, F4620 Series)

7mm x 5mm
LVPECL Oscillator



| TAPE SPECIFICATIONS (mm) | | | | | | | REEL SPECIFICATIONS (mm) | | | | | | |
|--------------------------|-----|-----|-----|------|------|----------------------------|--------------------------|-----|-----|-----|------|------|-----|
| A | B | C | D | E | F | STD REEL QTY | G | H | I | J | K | L | M |
| ø1.5 | 4.0 | 8.0 | 7.5 | 16.0 | 2.15 | -T1 = 1,000 -T2 = 2,000 | 2.0 | ø13 | ø21 | ø80 | ø255 | 17.5 | 2.0 |



Available Options & Part Identification for O7PS*

Sample PN: **FO7PSCBM62.5-T1**

| F | O7PS | C | B | M | 62.5 | -T1 |
|------------|---------------------|--|---|--|------------------------|---|
| Fox | Model Number | Voltage J = 2.5V±10% C = 3.3V±10% | Stability A = ±100PPM B = ±50PPM D = ±25PPM E = ±20PPM | Operating Temperature E = -10 to +70°C F = -20 to +70°C M = -40 to +85°C | Frequency (MHz) | Values Added Options Blank = Bulk T1 = 1,000 pcs T2 = 2,000 pcs |

*Not all frequencies in the frequency range, or every combination of stability, temp range, and voltage available.
See stabilities and op temps for each V_{DD}.

Reliability Test Conditions

Please contact Abracon Quality Assurance department