



## Features

- LVPECL Output
- Stabilities to  $\pm 20$  PPM
- Temperature Ranges  $-40^{\circ}\text{C}$  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 $\mu\text{A}$
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 <sup>1</sup>	200 nS
Output Enable Time <sup>1</sup>	10 mS
Phase Jitter (12kHz~20MHz BW)	0.3pS Typ.

ENABLE / DISABLE FUNCTION	
Pin <sup>1</sup>	Out 1 (pin 4), Out 2 (pin 5)
OPEN <sup>1</sup>	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 <sup>2</sup>		
Frequency Stability <sup>2</sup>	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

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

<sup>2</sup> Inclusive of  $25^{\circ}\text{C}$  tolerance, operating temperature range, input voltage change, load change, Shock, vibration, reflow, and one-year aging. (\*Excludes shock and vibration)

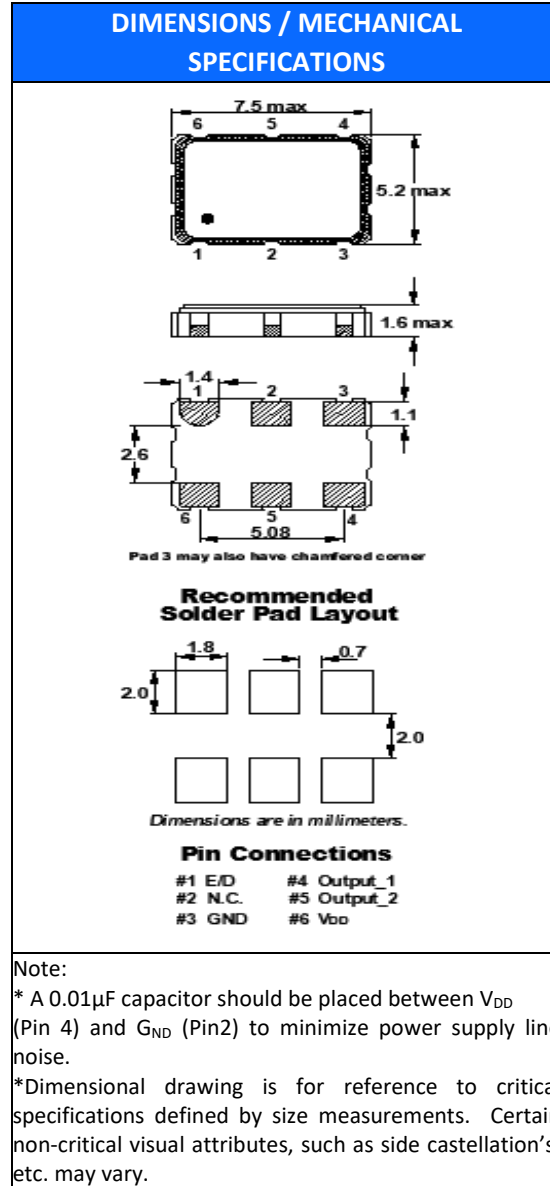
3.3V ELECTRICAL CHARACTERISTICS	
PARAMETERS	MAX (Unless otherwise noted)
Frequency Range	40.000 ~325.000 MHz
Temperature Range	
Storage (T <sub>STG</sub> )	-55°C ~ +125°C
Supply Voltage (V <sub>DD</sub> )	3.3V±10%
Input Current (I <sub>DD</sub> )	88mA
Standby Current	30 µA
Output Symmetry (50% V <sub>DD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

ENABLE / DISABLE FUNCTION	
Pin <sup>2</sup>	Out 1 (pin 4), Out 2 (pin 5)
OPEN <sup>1</sup>	Active
'1' Level V <sub>IH</sub> ≥ 70%V <sub>DD</sub>	Active
'0' Level V <sub>IL</sub> ≤ 30%V <sub>DD</sub>	High Z

Available Options by Stability & Operating Temp for 3.3V <sup>2</sup>		
Frequency Stability <sup>2</sup>	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

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

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



<b>STANDARD SPECIFICATIONS</b>	
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

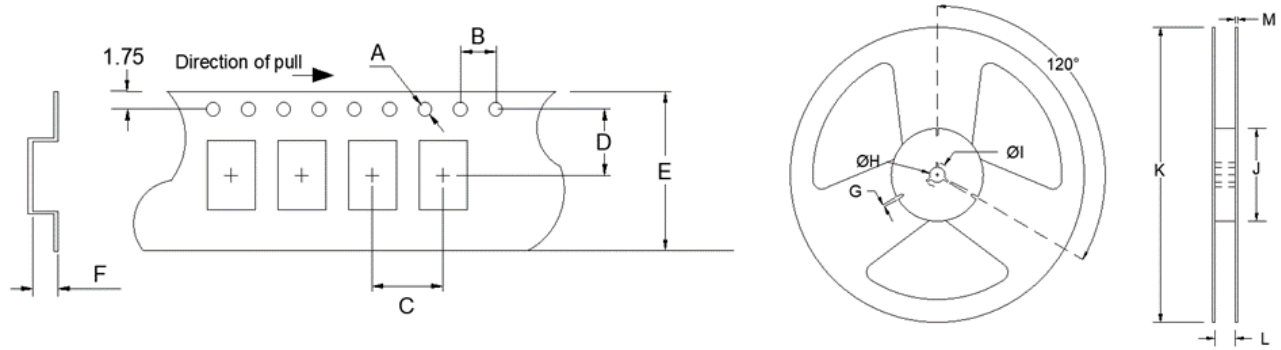
# FO7PS

(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
<b>Fox</b>	<b>Model Number</b>	<b>Voltage</b> J = 2.5V±10% C = 3.3V±10%	<b>Stability</b> A = ±100PPM B = ±50PPM D = ±25PPM E = ±20PPM	<b>Operating Temperature</b> E = -10 to +70°C F = -20 to +70°C M = -40 to +85°C	<b>Frequency (MHz)</b>	<b>Values Added Options</b> 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<sub>DD</sub>.

### Reliability Test Conditions

Please contact Abracon Quality Assurance department