

## Features

- LVDS Output
- Stabilities to  $\pm 20$  PPM
- Temperature Ranges as wide as  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
- Supply Voltages: 2.5V, 3.3V

2.5V ELECTRICAL CHARACTERISTICS	
PARAMETERS	MAX (Unless otherwise noted)
Frequency ( $F_o$ )	25.0 ~ 400.0 MHz
Storage Temperature Range ( $T_{STG}$ )	$-55 \sim +125^{\circ}\text{C}$
Supply Voltage ( $V_{DD}$ )	2.5V $\pm 10\%$ 3.3V $\pm 10\%$
Input Current ( $I_{DD}$ )	63 mA
Standby Current	30 $\mu\text{A}$
Output Symmetry (50% $V_{P-P}$ )	45% ~ 55%
Rise Time (20%~80% $V_{P-P}$ )	0.5 nS
Fall Time (80%~20% $V_{P-P}$ )	0.5 nS
Differential Output Voltage ( $V_{OD}$ )	0.247V ~ 0.454V
Differential Offset Voltage ( $V_{OS}$ )	1.125V ~ 1.375V
Output Termination	100 Ohms Typical
Start-up Time ( $T_S$ )	10 mS
Output Disable Time <sup>1</sup>	200 nS
Output Enable Time <sup>1</sup>	10 mS
Aging (per year @ 25C)	$\pm 3$ PPM
Phase Jitter (12kHz~20MHz)	1 pS

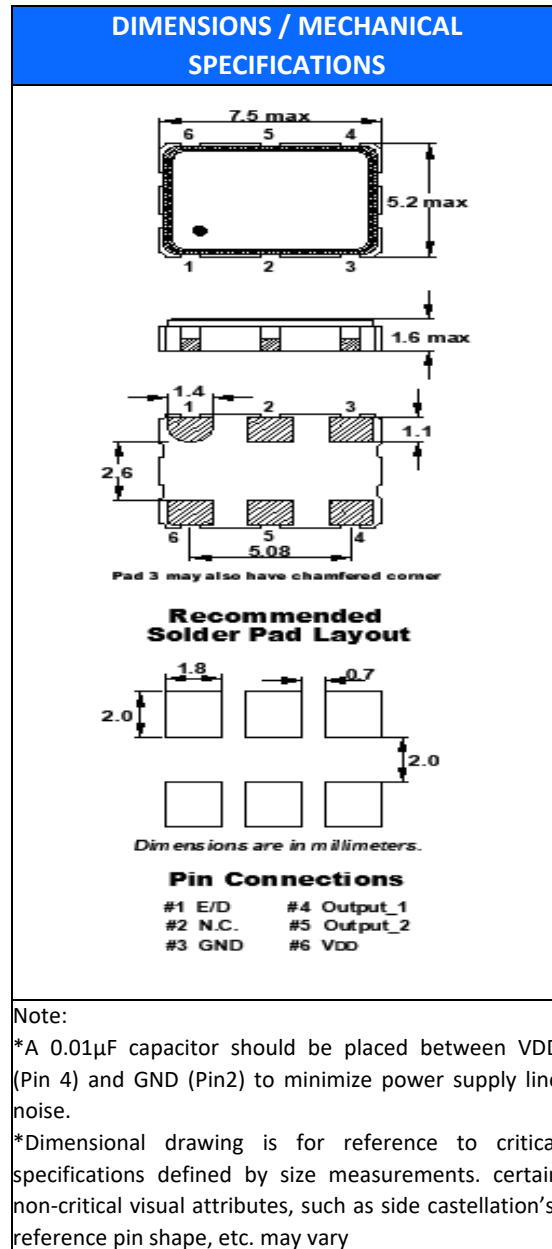
ENABLE / DISABLE FUNCTION	
Pin <sup>1</sup>	Out 1 (pin 4), Out 2 (pin 5)
OPEN <sup>1</sup>	Active
'1' Level $V_{IH} \geq 70\%V_{DD}$	Active
'0' Level $V_{IL} \leq 30\%V_{DD}$	High Z

Available Options by Stability & Operating Temp for 2.5V		
Frequency Stability <sup>2</sup>	Operating Temperature ( $^{\circ}\text{C}$ )	Frequency Range (MHz)
$\pm 100\text{PPM}^2$	$-10 \sim +70$	25.0 ~ 400.0
$\pm 100\text{PPM}^2$	$-40 \sim +85$	25.0 ~ 400.0
$\pm 100\text{PPM}^2$	$-40 \sim +105$	25.0 ~ 300.0
$\pm 50\text{PPM}^2$	$-10 \sim +70$	25.0 ~ 400.0
$\pm 50\text{PPM}^2$	$-40 \sim +85$	25.0 ~ 400.0
$\pm 50\text{PPM}^2$	$-40 \sim +105$	25.0 ~ 300.0
$\pm 25\text{PPM}^2$	$-10 \sim +70$	25.0 ~ 400.0
$\pm 25\text{PPM}^3$	$-40 \sim +85$	25.0 ~ 400.0
$\pm 20\text{PPM}^3$	$-10 \sim +70$	25.0 ~ 400.0

<sup>1</sup> An internal pull-up resistor from pin 1 to pin 6 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, Vibration, reflow, and one-year aging, shock, and vibration.

<sup>3</sup> Inclusive of 25 $^{\circ}\text{C}$  tolerance and operating temperature range.



<b>STANDARD SPECIFICATIONS</b>	
PARAMETERS	MAX (Unless otherwise noted)
Maximum Soldering Temp / Time	260°C / 10 Seconds x 2
Moisture Sensitivity Level (MSL) per J-STD-033	1
Termination Finish	Au (0.3~1 $\mu$ m) over Ni (1.27~8.89 $\mu$ m)
Seal Method	Seam
Lead (Pb) Free	Yes
RoHS Compliant	Yes, no exemptions
REACH Compliant	Yes

# FO7LS

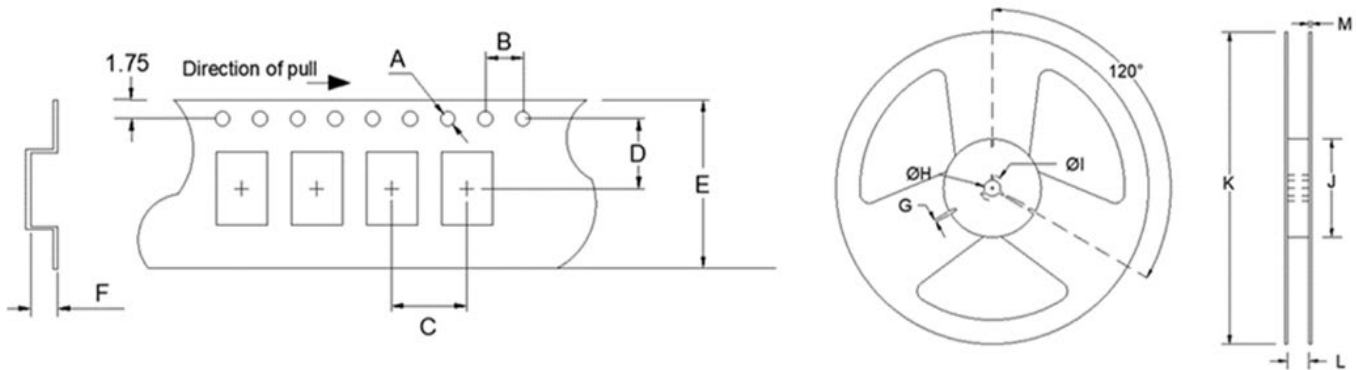
(Former F4700, F4710 Series)

7.0mm x 5.0mm

LVDS Oscillator



TAPE SPECIFICATIONS (mm)							REEL SPECIFICATIONS (mm)						
A	B	C	D	E	F	REEL QTY	G	H	I	J	K	L	M
ø1.55	4.0	8.0	7.5	16.0	2.1	-T2 = 2,000 -T1 = 1,000	2.0	ø13	ø21	ø80	ø255	17.5	2.0



### Available Options & Part Identification for LVDS Oscillator O7LS\*

Sample PN: FO7LS<sub>CDM</sub>125.0-T2

F	O7LS	C	D	M	125.0	-T2
<b>Fox</b>	<b>Model Number</b>	<b>Voltage</b> J = 2.5V±10% <b>C = 3.3V±10%</b>	<b>Stability</b> A = ±100PPM B = ±50PPM <b>D = ±25PPM</b> E = ±20 PPM	<b>Operating Temperature</b> E = -10 to +70°C <b>M = -40 to +85°C</b> P = -40 to +105°C	<b>Frequency (MHz)</b>	<b>Values Added Options</b> Blank = Bulk T1 = 1,000 pcs <b>T2 = 2,000 pcs</b>

\* Not all frequencies in the frequency range, or every combination of stability, temp range, and voltage available. See stabilities and op temps table on page 2.

### Reliability Test Conditions

Please contact Abracon Quality Assurance department