

# LVDS 7x5mm 3.3V Oscillator



F4700 SERIES

RoHS Compliant / Pb Free

Rev. 1/6/2006

[http://www.foxonline.com/need\\_a\\_sample.htm](http://www.foxonline.com/need_a_sample.htm)

## FEATURES

- 3.3V Operation
- LVDS Output
- Differential Outputs
- Standby Function
- Tape and Reel (2,000 pcs. STD)

XpressO® Equivalent  
**FXO-LC73**

Need a  
Sample®

Why XpressO?

Lower Cost, Faster Delivery, Low Jitter!

## • PART NUMBER SELECTION [Learn More](#) - Internet Required

Part Number	Model Number	Frequency Stability <sup>1</sup>	Operating Temperature (°C)	Frequency Range (MHz) <sup>2</sup>
703-Frequency-xxxxx	F4700	±100PPM	-10 ~ +70	80.000 ~ 230.000
704-Frequency-xxxxx	F4700R	±100PPM	-40 ~ +85	80.000 ~ 230.000
705-Frequency-xxxxx	F4705	±50PPM	-10 ~ +70	80.000 ~ 230.000
706-Frequency-xxxxx	F4705R	±50PPM	-40 ~ +85	80.000 ~ 170.000
707-Frequency-xxxxx	F4706	±25PPM	-10 ~ +70	80.000 ~ 170.000
708-Frequency-xxxxx	F4706R	±25PPM*	-40 ~ +85	80.000 ~ 170.000
709-Frequency-xxxxx	F4708	±20PPM*	-10 ~ +70	80.000 ~ 170.000

## • ELECTRICAL CHARACTERISTICS

PARAMETERS	MAX (unless otherwise noted)
Frequency Range (Fo)	80.000 ~ 250.000 MHz
Storage Temperature Range (T <sub>STG</sub> )	-55°C ~ +125°C
Supply Voltage (V <sub>DD</sub> )	3.3V ± 5%
Input Current (I <sub>DD</sub> )	66mA
Differential Output Voltage (V <sub>OD</sub> ) (Out 1 - Out 2)	0.247V ~ 0.454V (0.33V Typical)
Offset Voltage (V <sub>OS</sub> )	1.125V ~ 1.375V (1.25V Typical)
Differential Output Swing (V <sub>OP-P</sub> )	0.35V <sub>p-p</sub> Min
Output Symmetry (Output Crossing Point)	45% ~ 55%
Rise Time (T <sub>R</sub> ) (20% ~ 80% V <sub>OP-P</sub> )	0.7nS
Fall Time (T <sub>F</sub> ) (80% ~ 20% V <sub>OP-P</sub> )	0.7nS
Output Load (Out 1 - Out 2)	100 Ohms Typical
Standby Current	30μA
Start-up Time (T <sub>S</sub> )	10mS
Output Disable Time <sup>3</sup>	200nS
Output Enable Time <sup>3</sup>	10mS

<sup>1</sup> Inclusive of operating temperature range, input voltage change, load change, aging, shock, and vibration. (\*F4706R, F4708R: Excludes Shock/Vibration)

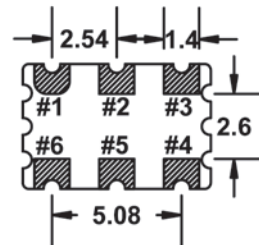
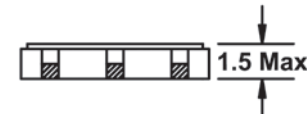
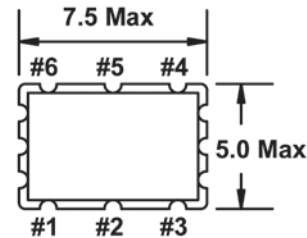
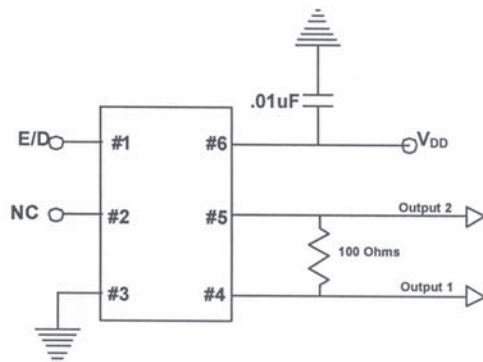
<sup>2</sup> Frequencies up to 250 MHz are available on an inquiry basis.

<sup>3</sup> An internal pullup resistor from pin 1 to pin 6 allows active output if pin 1 is left open.

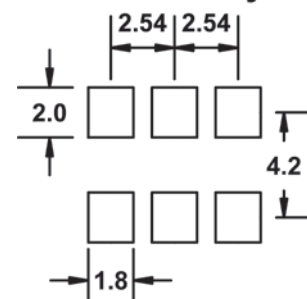
Note: A 0.01μF bypass capacitor should be placed between V<sub>DD</sub> (Pin 6) and GND (Pin 3) to minimize power supply line noise.

All specifications subject to change without notice.

### D. Recommended Circuit



### Recommended Solder Pad Layout



### Pin Connections

#1 E/D	#4 Output 1
#2 NC	#5 Output 2
#3 GND	#6 V <sub>DD</sub>

All dimensions are in millimeters.

### • ENABLE / DISABLE FUNCTION

(Pin 1)	OUTPUT (Pin 4)	OUTPUT (Pin 5)
OPEN <sup>3</sup>	ACTIVE	ACTIVE
'1' Level V <sub>IH</sub> ≥ 70% V <sub>DD</sub>	ACTIVE	ACTIVE
'0' Level V <sub>IL</sub> ≤ 30% V <sub>DD</sub>	High Z	High Z