

# FOX 3.3V LVDS OSCILLATOR WITH STANDBY MODEL: F4700 SERIES



## FEATURES

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



## PRELIMINARY



Learn more about:  
[Part Marking Identification](#)  
[Tape and Reel Specification](#)  
[Mechanical Specification](#)

Internet required

### • 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	62.500 ~ 250.000
704-Frequency-xxxxx	F4700R	±100PPM	-40 ~ +85	62.500 ~ 250.000
705-Frequency-xxxxx	F4705	±50PPM	-10 ~ +70	62.500 ~ 250.000
706-Frequency-xxxxx	F4705R	±50PPM	-40 ~ +85	62.500 ~ 250.000
707-Frequency-xxxxx	F4706	±25PPM	-10 ~ +70	62.500 ~ 250.000
708-Frequency-xxxxx	F4706R	±25PPM*	-40 ~ +85	62.500 ~ 250.000
709-Frequency-xxxxx	F4708	±20PPM*	-10 ~ +70	62.500 ~ 250.000

### • ELECTRICAL CHARACTERISTICS

	MAX (unless otherwise noted)
Frequency Range (Fo)	62.500 ~ 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
Output Symmetry (Output Crossing Point)	45% ~ 55%
Rise Time (20% ~ 80% (V <sub>DD</sub> ) (T <sub>R</sub> )	0.7nS
Fall Time (80% ~ 20% (V <sub>DD</sub> ) (T <sub>F</sub> )	0.7nS
Differential Output Voltage (V <sub>OD</sub> ) (Out 1 - Out 2)	0.247V ~ 0.454V (0.33V Typical)
Offset Voltage (V <sub>OS</sub> )	1.25V Typical
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 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, and vibration. \*Excludes Shock/Vibration

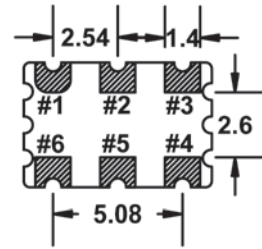
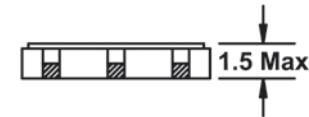
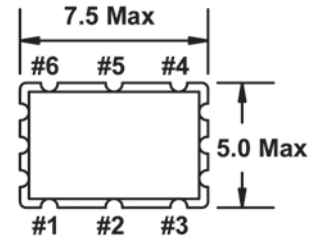
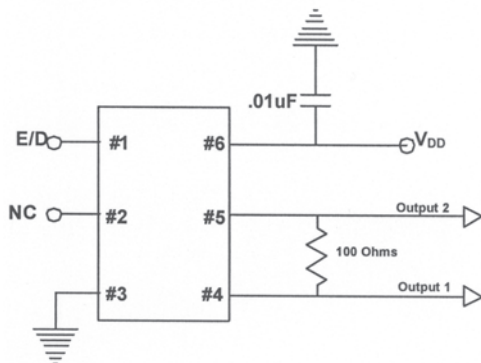
<sup>2</sup> Frequencies above 170 MHz up to 250 MHz are available on an inquiry basis.

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

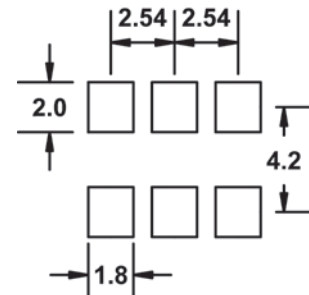
Note: A 0.01µF bypass capacitor should be placed between V<sub>DD</sub> (Pin 6) and GND (Pin 3) to minimize power supply line noise.

All specifications subject to change without notice. Rev. 6/1/04

#### 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

INH (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