

LVDS 7x5mm 3.3V Oscillator

F4700 SERIES
RoHS Compliant / Pb Free
Rev. 12/21/2005
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)

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

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• PART NUMBER SELECTION Learn More - Internet Required

Part Number	Model Number	Frequency Stability ¹	Operating Temperature (°C)	Frequency Range (MHz) ²
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 (Tstg)	-55°C ~ +125°C
Supply Voltage (VDD)	3.3V ± 5%
Input Current (IDD)	66mA
Differential Output Voltage (VOD) (Out 1 - Out 2)	0.247V ~ 0.454V (0.33V Typical)
Offset Voltage (Vos)	1.125V ~ 1.375V (1.25V Typical)
Differential Output Swing (Vop-p)	0.35Vp-p Min
Output Symmetry (Output Crossing Point)	45% ~ 55%
Rise Time (TR) (20% ~ 80% Vop-p)	0.7nS
Fall Time (TF) (80% ~ 20% Vop-p)	0.7nS
Output Load (Out 1 - Out 2)	100 Ohms Typical
Standby Current	30µA
Start-up Time (Ts)	10mS
Output Disable Time ³	200nS
Output Enable Time ³	10mS

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

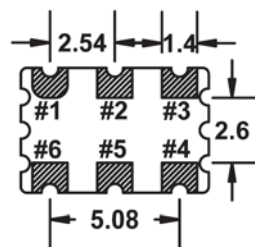
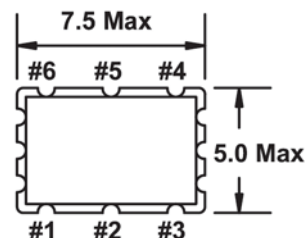
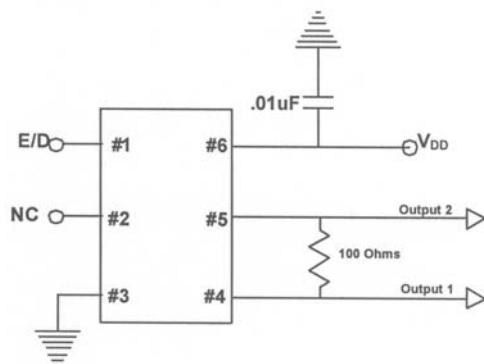
² Frequencies up to 250 MHz are available on an inquiry basis.

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

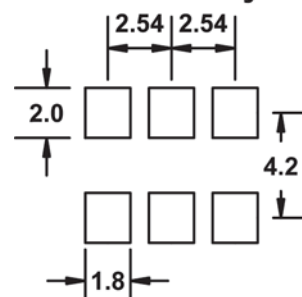
Note: A 0.01µF bypass capacitor should be placed between VDD (Pin 6) and GND (Pin 3) to minimize power supply line noise.

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 VDD

All dimensions are in millimeters.

• ENABLE / DISABLE FUNCTION

(Pin 1)	OUTPUT (Pin 4)	OUTPUT (Pin 5)
OPEN ³	ACTIVE	ACTIVE
'1' Level VIH ≥ 70% VDD	ACTIVE	ACTIVE
'0' Level VIL ≤ 30% VDD	High Z	High Z

LVDS 7x5mm 2.5V Oscillator

F4710 SERIES
RoHS Compliant / Pb Free
Rev. 12/21/2005

FEATURES

- 2.5V Operation
- LVDS Output
- Differential Outputs
- Standby Function
- Tape and Reel (2,000 pcs. STD)

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PRELIMINARY

• PART NUMBER SELECTION Learn More - Internet Required

Part Number	Model Number	Frequency Stability ¹	Operating Temperature (°C)	Frequency Range (MHz) ²
710-Frequency-xxxxx	F4710	±100PPM	-10 ~ +70	80.000 ~ 170.000
711-Frequency-xxxxx	F4710R	±100PPM	-40 ~ +85	80.000 ~ 170.000
712-Frequency-xxxxx	F4715	±50PPM	-10 ~ +70	80.000 ~ 170.000
713-Frequency-xxxxx	F4715R	±50PPM	-40 ~ +85	80.000 ~ 170.000
714-Frequency-xxxxx	F4716	±25PPM	-10 ~ +70	80.000 ~ 170.000
715-Frequency-xxxxx	F4716R	±25PPM*	-40 ~ +85	80.000 ~ 170.000
716-Frequency-xxxxx	F4718	±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 (TSTG)	-55°C ~ +125°C
Supply Voltage (VDD)	2.5V ± 5%
Input Current (IDD)	63mA
Differential Output Voltage (VOD) (Out 1 - Out 2)	0.247V ~ 0.454V (0.33V Typical)
Offset Voltage (Vos)	1.125V ~ 1.375V (1.25V Typical)
Differential Output Swing (Vop-p)	0.25Vp-p Min
Output Symmetry (Output Crossing Point)	45% ~ 55%
Rise Time (TR) (20% ~ 80% VDD)	0.7nS
Fall Time (TF) (80% ~ 20% VDD)	0.7nS
Output Load (Out 1 - Out 2)	100 Ohms Typical
Standby Current	30μA
Start-up Time (Ts)	10mS
Output Disable Time ³	200nS
Output Enable Time ³	10mS

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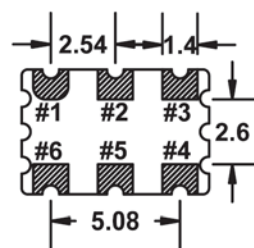
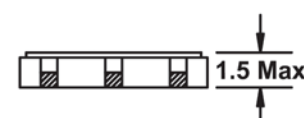
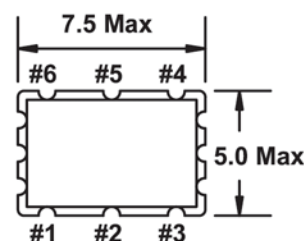
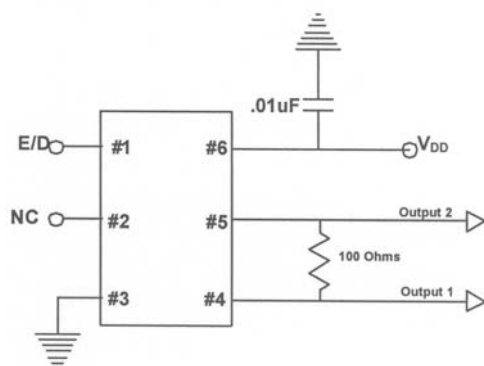
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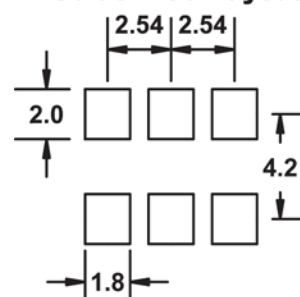
Note: A 0.01μF bypass capacitor should be placed between VDD (Pin 6) and GND (Pin 3) to minimize power supply line noise.

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