

LVDS 7x5mm 3.3V Oscillator



F4700 SERIES

RoHS Compliant / Pb Free

Rev. 9/24/2012

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)



• PART NUMBER SELECTION

Part Number	Model Number	Frequency Stability ¹	Operating Temperature (°C)	Frequency Range (MHz)
703-Frequency-xxxxx	F4700	±100PPM	-10 ~ +70	75.000 ~ 270.000
704-Frequency-xxxxx	F4700R	±100PPM	-40 ~ +85	75.000 ~ 270.000
705-Frequency-xxxxx	F4705	±50PPM	-10 ~ +70	75.000 ~ 270.000
706-Frequency-xxxxx	F4705R	±50PPM	-40 ~ +85	75.000 ~ 270.000
707-Frequency-xxxxx	F4706	±25PPM	-10 ~ +70	75.000 ~ 270.000
708-Frequency-xxxxx	F4706R	±25PPM*	-40 ~ +85	75.000 ~ 170.000
709-Frequency-xxxxx	F4708	±20PPM*	-10 ~ +70	75.000 ~ 180.000

• ELECTRICAL CHARACTERISTICS

PARAMETERS	MAX (unless otherwise noted)
Frequency Range (Fo)	75.000 ~ 270.000 MHz
Storage Temperature Range (T _{STG})	-55°C ~ +125°C
Supply Voltage (V _{DD})	3.3V ± 5%
Input Current (I _{DD})	66mA
Differential Output Voltage (V _{OD}) (Out 1 - Out 2)	0.247V ~ 0.454V (0.33V Typical)
Offset Voltage (V _{OS})	1.125V ~ 1.375V (1.25V Typical)
Differential Output Swing (V _{OP-P})	0.35V _{p-p} Min
Output Symmetry (Output Crossing Point)	45% ~ 55%
Rise Time (T _R) (20% ~ 80% V _{p-p})	0.7nS
Fall Time (T _F) (80% ~ 20% V _{p-p})	0.7nS
Output Load (Out 1 - Out 2)	100 Ohms Typical
Standby Current	30μA
Start-up Time (T _S)	10mS
Output Disable Time ²	200nS
Output Enable Time ²	10mS

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

²An internal pullup resistor from pin 1 to pin 6 allows active output if pin 1 is left open.

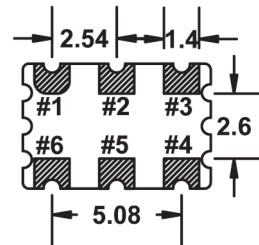
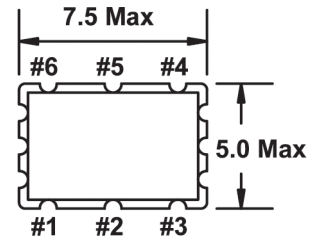
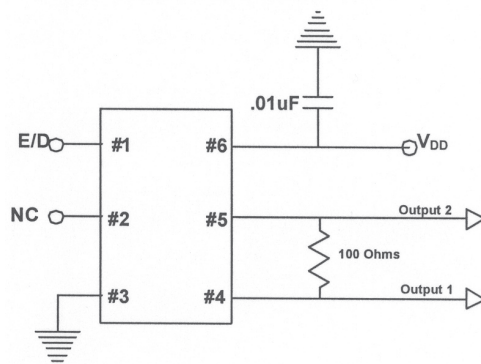
Note: A 0.01μF bypass capacitor should be placed between V_{DD} (Pin 6) and GND (Pin 3) to minimize power supply line noise.

Drawing is for reference to critical specifications defined by size measurements.

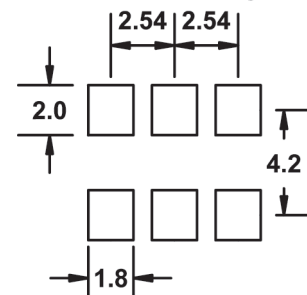
Certain non-critical visual attributes, such as side castellations, reference pin shape, etc. may vary.

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 _{DD}

All dimensions are in millimeters.

• ENABLE / DISABLE FUNCTION

(Pin 1)	OUTPUT (Pin 4)	OUTPUT (Pin 5)
OPEN ²	ACTIVE	ACTIVE
'1' Level V _{IH} ≥ 70% V _{DD}	ACTIVE	ACTIVE
'0' Level V _{IL} ≤ 30% V _{DD}	High Z	High Z