

LVDS 7x5mm 2.5V Oscillator



F4710 SERIES

RoHS Compliant / Pb Free

Rev. 1/6/2006

FEATURES

- 2.5V 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



• 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 (T _{STG})	-55°C ~ +125°C
Supply Voltage (V _{DD})	2.5V ± 5%
Input Current (I _{DD})	63mA
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})	0.25V _{p-p} Min
Output Symmetry (Output Crossing Point)	45% ~ 55%
Rise Time (T _R) (20% ~ 80% V _{DD})	0.7nS
Fall Time (T _F) (80% ~ 20% V _{DD})	0.7nS
Output Load (Out 1 - Out 2)	100 Ohms Typical
Standby Current	30μA
Start-up Time (T _S)	10mS
Output Disable Time ³	200nS
Output Enable Time ³	10mS

¹ Inclusive operating temperature range, input voltage change, load change, aging, shock, and vibration. (*F4716R, F4718R: Excludes Shock/Vibration)

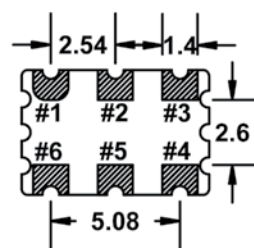
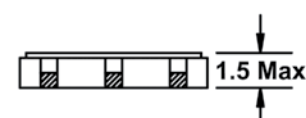
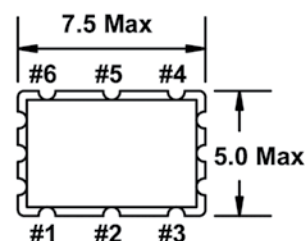
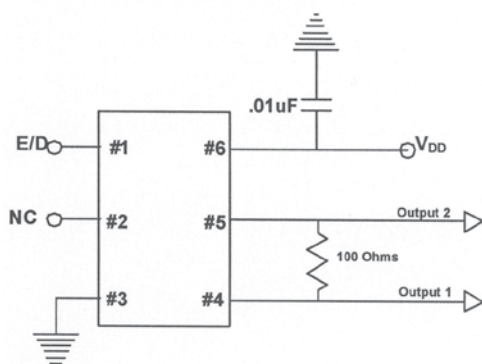
² Frequencies up to 250 MHz are available on an inquiry basis.

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

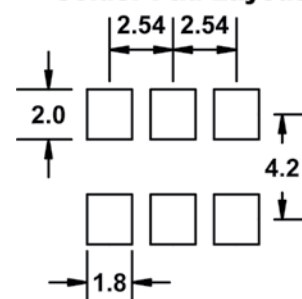
Note: A 0.01μF bypass capacitor should be placed between V_{DD} (Pin 6) and GND (Pin 3) to minimize power supply line noise.

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 _{DD}

All dimensions are in millimeters.

• ENABLE / DISABLE FUNCTION

(Pin 1)	OUTPUT (Pin 4)	OUTPUT (Pin 5)
OPEN ³	ACTIVE	ACTIVE
'1' Level V _{IH} ≥ 70% V _{DD}	ACTIVE	ACTIVE
'0' Level V _{IL} ≤ 30% V _{DD}	High Z	High Z