

# 3.3V LV-PECL OSCILLATOR WITH STANDBY F4600 SERIES

## FEATURES

- 3.3V Operation
- LV-PECL Output
- Complementary Outputs
- Standby Function
- Tape and Reel (2,000 pcs. STD)
- Pb Free



• MODEL NUMBER SELECTION			
Model Number	Frequency Stability <sup>1</sup>	Operating Temperature (°C)	Frequency Range (MHz)
F4600	±100PPM	-10 ~ +70	75.000 ~ 170.000
F4600R	±100PPM	-40 ~ +85	75.000 ~ 170.000
F4605	±50PPM	-10 ~ +70	75.000 ~ 170.000
F4605R	±50PPM	-40 ~ +85	75.000 ~ 170.000
F4606	±25PPM	-10 ~ +70	75.000 ~ 170.000
F4606R	±25PPM	-40 ~ +85	75.000 ~ 170.000
F4608	±20PPM	-10 ~ +70	75.000 ~ 170.000

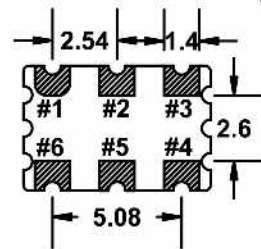
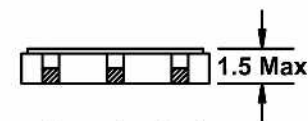
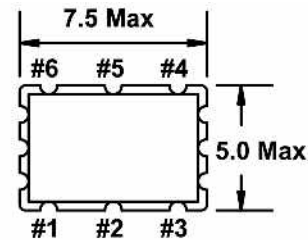
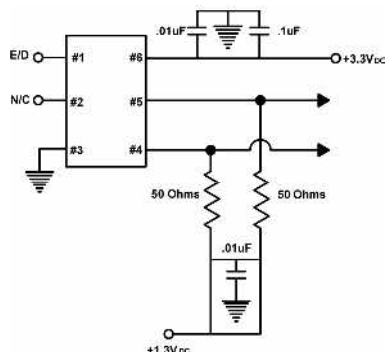
• ELECTRICAL CHARACTERISTICS	
PARAMETERS	MAX (unless otherwise noted)
Frequency Range (Fo)	75.000 ~ 170.000 MHz
Storage Temperature Range (T <sub>STG</sub> )	-55°C ~ +125°C
Supply Voltage (V <sub>DD</sub> )	3.3V ± 5%
Input Current (I <sub>DD</sub> )	60mA
Output Symmetry (50% V <sub>p-p</sub> Level)	40% ~ 60%
Rise Time (20% ~ 80% V <sub>p-p</sub> ) (T <sub>R</sub> )	1nS
Fall Time (80% ~ 20% V <sub>p-p</sub> ) (T <sub>F</sub> )	1nS
Output Voltage (V <sub>OL</sub> )	1.7V
(V <sub>OH</sub> )	2.2V Min
Output Load	See Below
Standby Current	30µA
Start-up Time (T <sub>S</sub> )	10mS
Output Disable Time <sup>2</sup>	100nS
Output Enable Time <sup>2</sup>	10mS

<sup>1</sup> Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, and vibration.

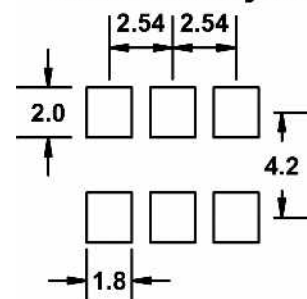
<sup>2</sup> An internal pullup resistor from pin 1 to pin 4 allows active output if pin 1 is left open. See page 30 for mechanical specifications, test circuits, and output waveform.

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. Rev. 07/9/03



### 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>2</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

See page 60 for tape and reel specifications.