

# Analog IP Cell

## Low Power 25 MHz Oscillator

### OSC\_25MHz – XFAB XH018

#### General Description

This cell is a trimmable, low power oscillator with a nominal frequency of 25 MHz.

#### Ratings, Parameters and Conditions

Absolute Maximum Ratings						
Parameter / Condition	Symbol	Min	Typ	Max	Unit	Comment
Operating Temperature	T <sub>OP</sub>	-40		120	°C	
Supply Voltage	V <sub>DD</sub>	-0.3		2.0	V	
Input Voltage	V <sub>IN</sub>	-0.3		V <sub>DD</sub> +0.7	V	
Output Voltage	V <sub>OUT</sub>	-0.3		V <sub>DD</sub> +0.7	V	

Electrical Parameters						
Parameter / Condition	Symbol	Min	Typ	Max	Unit	Comment
Operating Temperature	T <sub>OP</sub>	-40		85	°C	
Supply Voltage	V <sub>DD</sub>	1.6	1.8	2.0	V	
Current Consumption	I <sub>DD</sub>			15	µA	25 MHz operation
Clock Frequency	f <sub>CLK</sub>	10	25	40	MHz	trimmable
Startup Time	T <sub>SU</sub>			2	µs	

#### Interface and Symbol

IO-Description			
Interface	I/O	Function	Comment
VREF	input	reference voltage input	~1.2 V
TRIM	input	trim value	
ENABLE	input	enable	
CPUCLK	output	clock output	
VDD18, VSS	power	supply voltage	

