

## Features

- HCSL Differential Output
- Stabilities to  $\pm 25$  PPM
- Temperature Ranges as wide as  $-40^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$
- Supply Voltage: 3.3V

SPECIFICATIONS	
PARAMETERS	MAX (Unless otherwise noted)
Frequency Range (Fo)	13.5 ~ 160MHz
Temperature Range Storage (T <sub>STG</sub> )	$-55^{\circ}\text{C}$ ~ $+125^{\circ}\text{C}$
Supply Voltage (V <sub>DD</sub> )	3.3V $\pm 10\%$
Input Current (I <sub>DD</sub> )	40 mA
Standby Current	10 $\mu\text{A}$
Output Symmetry (50% V <sub>P-P</sub> )	45 % ~ 55 %
Rise Time (20%~80% V <sub>P-P</sub> ) (T <sub>R</sub> /T <sub>F</sub> )	
13.500 ~ 99.999999 MHz	1.0 nS
100.0 ~ 160.000 MHz	0.7 nS
Output Voltage (VOL)	$-0.15\text{V}$ ~ $0.15\text{V}$
(VOH)	$0.55\text{V}$ ~ $0.85\text{V}$
Output Swing (V <sub>OPP</sub> )	0.65V Min
Output Load	50 Ohms to GND
Start-up Time (T <sub>S</sub> )	10 mS
Output Disable Time <sup>1</sup>	200 nS
Output Enable Time <sup>1</sup>	10 mS
Aging (per year @ 25C)	$\pm 3$ PPM
Phase Jitter (12kHz~20MHz)	1 pS RMS

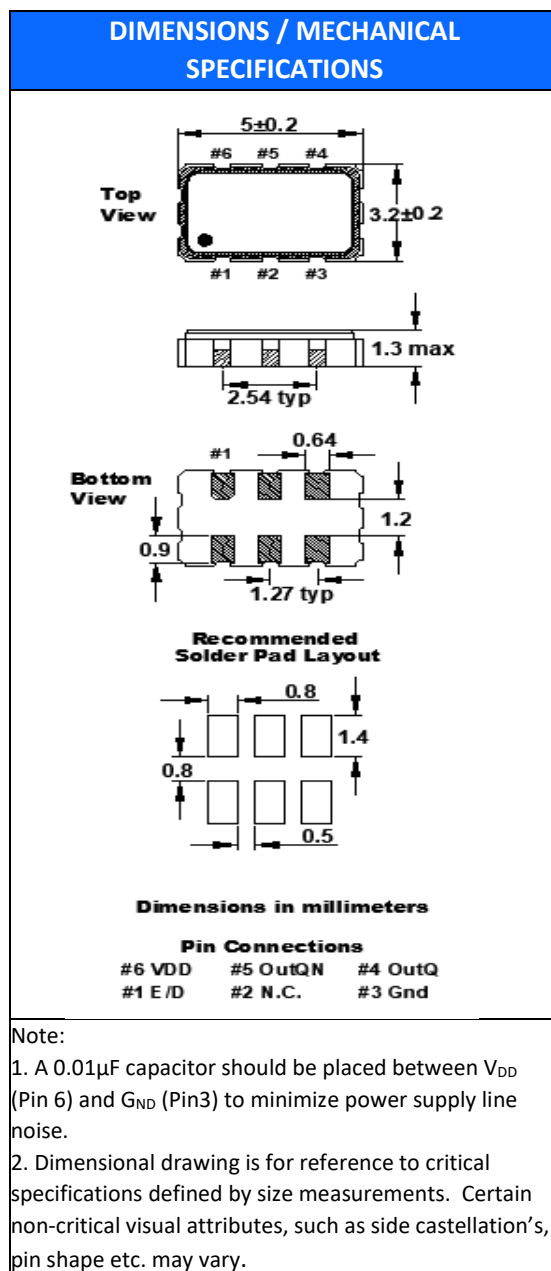
<sup>1</sup> An internal pull-up resistor from pin 1 to pin 4 allows active output if pin 1 is left open

ENABLE / DISABLE FUNCTION	
Pin <sup>1</sup>	Out 1 (pin 4), Out 2 (pin 5)
OPEN <sup>1</sup>	Active
'1' Level V <sub>IH</sub> $\geq 70\%V_{DD}$	Active
'0' Level V <sub>IL</sub> $\leq 30\%V_{DD}$	High Z

Available Options by Stability & Operating Temp		
Frequency Stability	Operating Temperature ( $^{\circ}\text{C}$ )	Frequency Range (MHz)
$\pm 100\text{PPM}^2$	$-20 \sim +70$	13.500 ~ 160.000
$\pm 100\text{PPM}^2$	$-40 \sim +85$	13.500 ~ 160.000
$\pm 100\text{PPM}^2$	$-40 \sim +105$	13.500 ~ 160.000
$\pm 50\text{PPM}^2$	$-20 \sim +70$	13.500 ~ 160.000
$\pm 50\text{PPM}^2$	$-40 \sim +85$	13.500 ~ 160.000
$\pm 50\text{PPM}^2$	$-40 \sim +105$	13.500 ~ 160.000
$\pm 25\text{PPM}^2$	$-20 \sim +70$	13.500 ~ 160.000
$\pm 25\text{PPM}^3$	$-40 \sim +85$	13.500 ~ 160.000

<sup>2</sup> Inclusive of 25 $^{\circ}\text{C}$  tolerance, operating temperature range, input voltage change, load change, shock, vibration, reflow, and one-year aging.

<sup>3</sup> Inclusive of 25C tolerance and operating temperature range



<b>STANDARD SPECIFICATIONS</b>	
PARAMETERS	MAX (Unless otherwise noted)
Maximum Soldering Temp / Time	260°C / 10 Seconds x 2
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au over Ni
Seal Method	Seam
Lead (Pb) Free	Yes
REACH/REACH Compliant	Yes

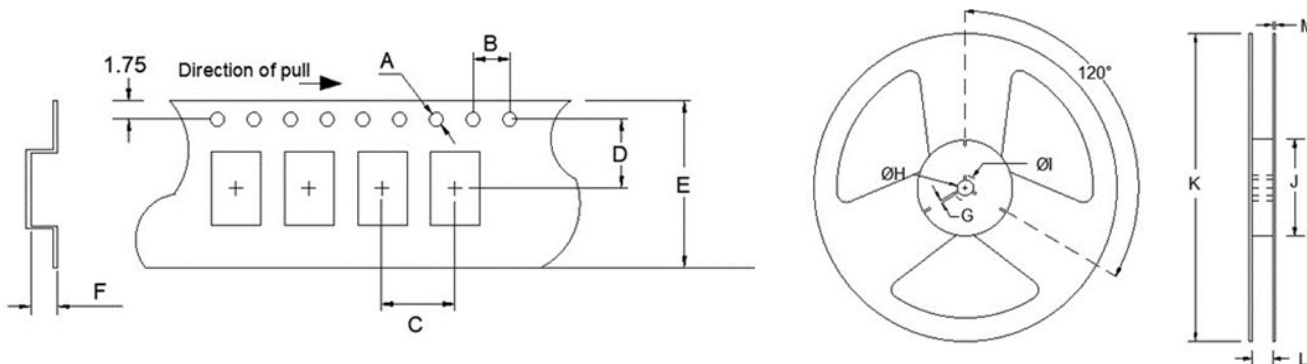
# FO5SL

(Former F530SL Series)

5.0mm x 3.2mm  
SMD HCSL Oscillator



TAPE SPECIFICATIONS (mm)						REEL SPECIFICATIONS (mm)							
A	B	C	D	E	F	REEL QTY	G	H	I	J	K	L	M
ø1.5	4.0	8.0	5.5	12.0	1.5	-T1 = 1,000	2.0	ø13	ø21	ø60	ø180	13.0	2.0



### Available Options & Part Identification for SMD LVDS Oscillator O5SL\*

Sample PN: **FO5SLCBF125.0 -T1**

F	O5SL	C	B	F	125.0	-T1
<b>Fox</b>	<b>Model Number</b>	<b>Voltage</b> C = 3.3V±10%	<b>Stability</b> A = ±100 PPM B = ±50 PPM D = ±25 PPM	<b>Operating Temperature</b> F = -20 to +70°C M = -40 to +85°C P = -40 to +105°C	<b>Frequency (MHz)</b>	<b>Reel Quantity</b> Blank = Bulk T1 = 1,000 pcs

\* Not all frequencies in the frequency range, or every combination of stability, temp range, and voltage available. See stabilities and op temps for each V<sub>DD</sub>.

#### Reliability Test Conditions

Please contact Abracon Quality Assurance department