

## Features

- Low Input Current
- Stabilities to  $\pm 20$  PPM
- Temperature Ranges from  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
- Supply Voltages: 3.3V

3.3V ELECTRICAL CHARACTERISTICS	
PARAMETERS	MAX (Unless otherwise noted)
Frequency Range ( $F_0$ )	1.800 ~ 50.000 MHz
Temperature Range	
Storage ( $T_{STG}$ )	$-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$
Supply Voltage ( $V_{DD}$ )	$3.3\text{V} \pm 5\%$
Input Current ( $I_{DD}$ )	
1.800 ~ 32.000MHz	2.5 mA
32.000+ ~ 50.000MHz	3.5 mA
Standby Current ( $I_{ST}$ )	10 $\mu\text{A}$
Output Symmetry (50% $V_{DD}$ )	45 % ~ 55 %
Rise/Fall Time (10%~90% $V_{DD}$ Levels) ( $T_R/T_F$ )	12 nS
Output Voltage ( $V_{OL}$ )	10 % $V_{DD}$
( $V_{OH}$ )	90 % $V_{DD}$ Min
Output Load (HCMOS)	15 pF
Start-up Time ( $T_S$ )	5 mS
Output Disable Time <sup>1</sup>	150 nS
Output Enable Time <sup>1</sup>	5 mS

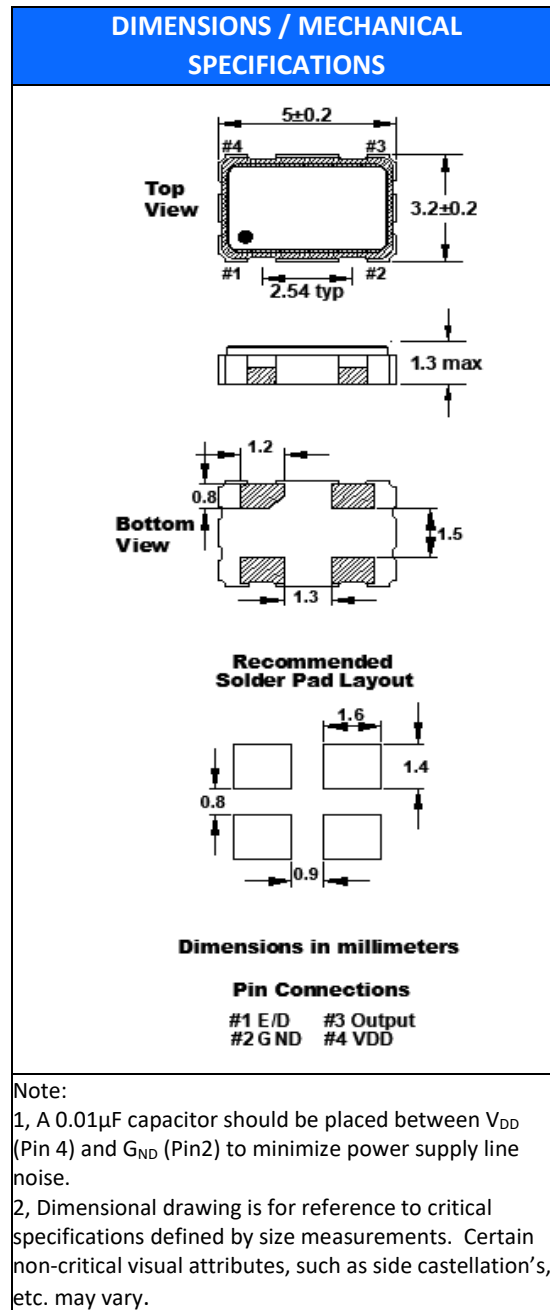
ENABLE / DISABLE FUNCTION	
Pin1	Output (pin 3)
OPEN <sup>1</sup>	Active
'1' Level $V_{IH} \geq 70\%V_{DD}$	Active
'0' Level $V_{IL} \leq 30\%V_{DD}$	High Z

Available Options by Stability & Operating Temp		
Frequency Stability	Operating Temperature ( $^{\circ}\text{C}$ )	Frequency Range (MHz)
$\pm 100\text{PPM}^2$	$-10 \sim +70$	1.800 ~ 50.000
$\pm 100\text{PPM}^2$	$-40 \sim +85$	1.800 ~ 50.000
$\pm 50\text{PPM}^2$	$-10 \sim +70$	1.800 ~ 50.000
$\pm 50\text{PPM}^2$	$-40 \sim +85$	1.800 ~ 50.000
$\pm 25\text{PPM}^2$	$-10 \sim +70$	1.800 ~ 50.000
$\pm 25\text{PPM}^3$	$-40 \sim +85$	1.800 ~ 50.000
$\pm 25\text{PPM}^3$	$-10 \sim +70$	1.800 ~ 50.000

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

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

<sup>3</sup> Inclusive of  $25^{\circ}\text{C}$  tolerance and operating temperature range.



<b>STANDARD SPECIFICATIONS</b>	
<b>PARAMETERS</b>	<b>MAX (Unless otherwise noted)</b>
Maximum Soldering Temp / Time	260°C / 10 Seconds x 2
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au (0.3~1µm) over Ni (1.27~8.89µm)
Seal Method	Seam
Lead (Pb) Free	Yes
ROHS/REACH Compliant (latest version)	Yes

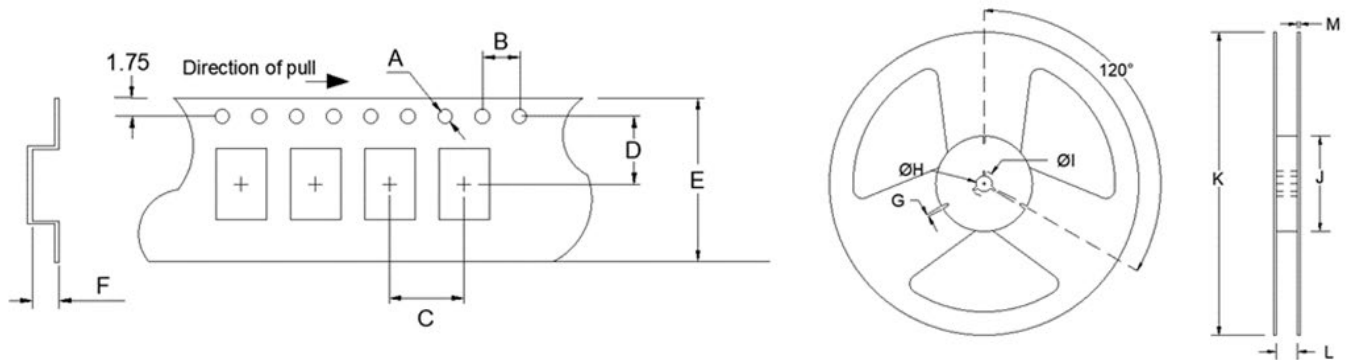
# FO5HL

(Former F530LA)

5mm x 3.2mm  
HCMOS SMD 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	ø62	ø180	13.5	2.0



### Available Options & Part Identification\*

Sample PN: **FO5HLBBM25.0-T1**

F	O5HL	B	B	M	25.0	-T1
<b>Fox</b>	<b>Model Number</b>	<b>Voltage</b> B = 3.3V±5%	<b>Stability</b> A = ±100 PPM B = ±50 PPM D = ±25 PPM E = ±20 PPM	<b>Operating Temperature</b> E = -10 to +70°C M = -40 to +85°C	<b>Frequency (MHz)</b>	<b>Values Added Options</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