5x3.2mm LVPECL SMD Oscillator

O5PS
(former F530P/F540P)
DATASHEET

- LV-PECL
- Temperature Ranges to -40ºC to +85ºC
- Supply Voltages: 3.3V; 2.5V

ELECTRICAL CHARACTERISTICS

PARAMETERS	MAX (unless otherwise noted)	
Supply Voltage (V_{DD})	3.3V±5%	2.5V±5%
Frequency Range (F_O)	13.5 ~ 325MHz	13.5 ~ 250MHz
Storage Temperature Range (T_{STG})	-55 ~ +125°C	
Input Current (I_{DD})	88mA	
Standby Current	30µA	
Output Symmetry (50% V_{p-p} level) 13.5 ~ 156.25MHz >156.25MHz	 45% ~ 55% 40% ~ 60%	
Rise Time (20% ~80% V_{p-p} Levels) (T_R)	1nS	
Fall Time (80% ~ 20% V_{p-p} Levels) (T_F)	1nS	
Output Voltage (V_{OL}) (V_{OH})	1.68V 2.275V Min	1.095V 1.475V Min
Output Load	50 Ohms to Vdd-2.0V	
Start-up Time (T_S)	10mS	
Disable Time	200nS	
Enable Time	10mS	
Phase Jitter, RMS (12kHz to 20MHz BW)	1pS	

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

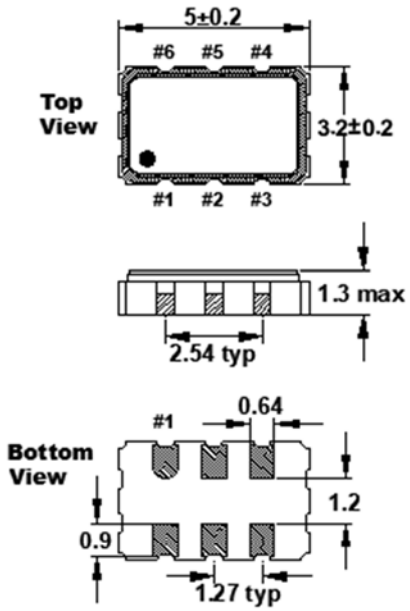
Frequency Stability	Operating Temperature (ºC)
±100PPM[2]	-20 ~ +70
±100PPM[2]	-40 ~ +85
±50PPM[2]	-20 ~ +70
±50PPM[2]	-40 ~ +85
±25PPM[2]	-20 ~ +70
±25PPM[3]	-40 ~ +85

[1] An internal pull-up resistor from pin 1 to pin 6 allows active output if pin 1 is left open.
[2] Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, reflow, one-year aging, shock, and vibration.
[3] Inclusive of 25°C tolerance, operating temperature range.

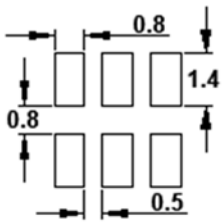
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Title / Description: O5PS SERIES STANDARD SPECIFICATIONS		
Drawing Number: O5PS-DOC-1		**Size:** A
Part Number:		**Cage:** 61429
Draftsperson: BEC	**Approved:** MAJ	**Revision Date: 08/29/2019**

DIMENSIONS / MECHANICAL SPECIFICATIONS



Recommended Solder Pad Layout



Dimensions in millimeters

Pin Connections

#6 VDD	#5 OutQN	#4 OutQ
#1 E/D	#2 N.C.	#3 Gnd

Maximum Soldering Temp / Time	260°C / 10 Seconds x2
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au over Ni
Seal Method	Seam
Lead (Pb) Free	Yes
ROHS/REACH Compliant	Yes

Notes:
*A 0.01µF capacitor should be placed between V_{DD} (Pin 6) and GND (Pin3) to minimize power supply line noise.
*Dimensional drawing is for reference to critical specifications defined by size measurements.
Certain non-critical visual attributes, such as side castellations, reference pin shape, etc. may vary

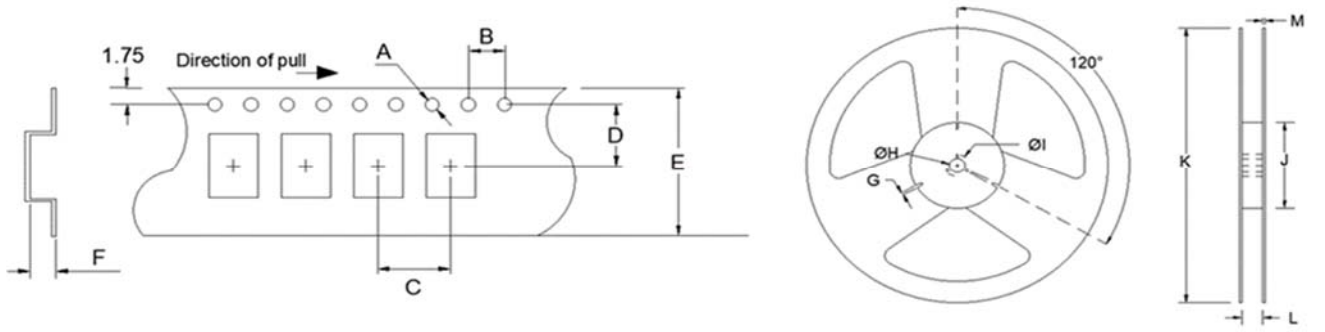
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Tape Specifications (millimeters)								Reel Specifications (millimeters)						
A	B	C	D	E	F	Reel Qty		G	H	I	J	K	L	M
Ø1.55	4.0	8.0	5.5	16.0	1.4	-T1 = 1,000		2.0	Ø13	Ø21	Ø60	Ø180	13.0	2.0



Available Options & Part Identification*

Example: F O5PS C B M 125.0

F	O5PS	B	B	M	125.0
Fox	**Model Number**	**Voltage**	**Stability**	**Operating**	**Frequency**
		C = 3.3V±5%	A = ±100 PPM	**Temperature**	
		H = 2.5V±5%	**B = ±50 PPM**	F = -20 to +70ºC	
			D = ±25 PPM	**M = -40 to +85°C**	

*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_{DD}.

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