



5.0x3.2mm LVDS Oscillator

O5LS DATASHEET (Former F540D, F530D series)

- LVDS Output
- Stabilities to ± 20 PPM
- Temperature Ranges as wide as 40°C to $+85^{\circ}\text{C}$
- Supply Voltages: 2.5V, 3.3V

Specifications

PARAMETERS	MAX (unless otherwise noted)
Frequency Range	25.000 ~ 170.000 MHz
Storage Temperature Range (T_{STG})	$-55 \sim +125^{\circ}\text{C}$
Supply Voltage (V_{DD})	$2.5\text{V} \pm 10\%$, $3.3\text{V} \pm 10\%$
Input Current (I_{DD})	50 mA
Standby Current	15 μA
Output Symmetry (50% V_{P-P})	45% ~ 55%
Rise Time (20%~80% V_{P-P})	0.5 nS
Fall Time (80%~20% V_{P-P})	0.5 nS
Differential Output Voltage (V_{OD})	0.247V ~ 0.454V
Differential Offset Voltage (V_{OS})	1.125V ~ 1.375V
Output Load	100 Ohms Typical
Start-up Time (T_S)	10 mS
Output Disable Time ¹	200 nS
Output Enable Time ¹	10 mS
Aging (per year @ 25C)	± 3 PPM
Phase Jitter (12kHz~20MHz)	0.5 pS
Maximum Soldering Temp / Time	260°C / 10 Seconds
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au over Ni
Seal Method	Seam Seal
Lead (Pb) Free	Yes
ROHS/REACH Compliant	Yes

ENABLE / DISABLE FUNCTION

Pin1	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

• Available Options by Stability & Operating Temp²

Frequency Stability ²	Operating Temperature ($^{\circ}\text{C}$)	Frequency Range (MHz)
$\pm 100\text{PPM}$	$-20 \sim +70$	25.000 ~ 170.000
$\pm 100\text{PPM}$	$-40 \sim +85$	25.000 ~ 170.000
$\pm 50\text{PPM}$	$-20 \sim +70$	25.000 ~ 170.000
$\pm 50\text{PPM}$	$-40 \sim +85$	25.000 ~ 170.000
$\pm 25\text{PPM}$	$-20 \sim +70$	25.000 ~ 170.000
$\pm 25\text{PPM}$	$-40 \sim +85$	25.000 ~ 170.000
$\pm 20\text{PPM}$	$-20 \sim +70$	25.000 ~ 170.000

¹ An internal pull-up resistor from pin 1 to pin 6 allows active output if pin 1 is left open.

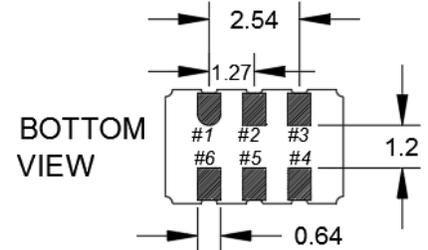
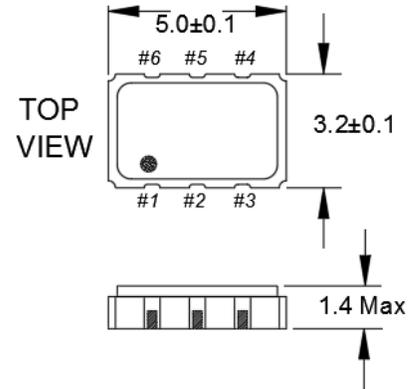
² Inclusive of 25°C tolerance, and operating temperature range.

Notes:

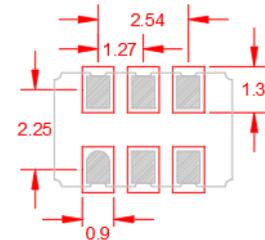
A $0.01\mu\text{F}$ capacitor should be placed between V_{DD} (Pin 6) and GND (Pin3) to minimize power supply line noise.

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



Recommended Solder Pad Layout



Dimensions are in millimeters.

Pin Connections

#1 E/D	#4 Output_1
#2 NC	#5 Output_2
#3 GND	#6 V_{DD}

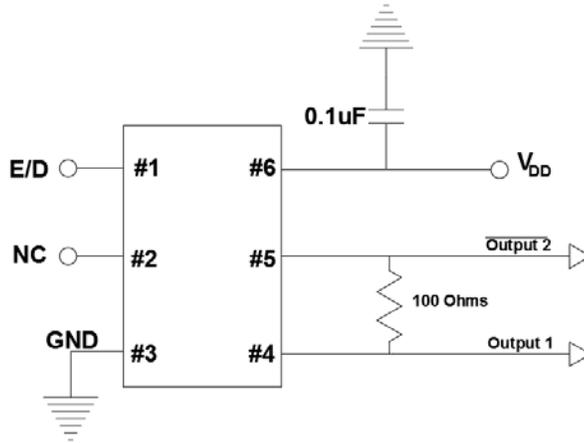
Reference / Comments	Title / Description: O5LS SERIES STANDARD SPECIFICATIONS		
	Drawing Number: 101137		Size: A
	Part Number:		Cage: 61429
	Draftsperson: CMR		Approved: BEC
			Date: 08/21/2017



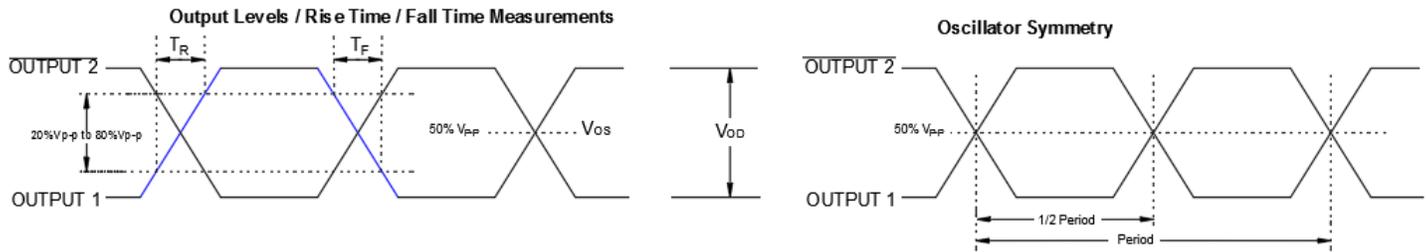
5.0x3.2mm LVDS Oscillator

O5LS DATASHEET
(Former F540D, F530D series)

RECOMMENDED CIRCUIT

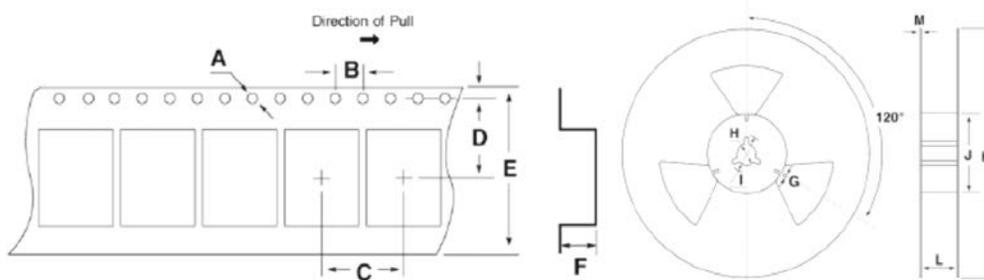


WAVEFORM CHARACTERISTICS



TAPE/REEL SPECIFICATIONS

Tape Specifications (millimeters)							Reel Specifications (millimeters)							
A	B	C	D	E	F	Std Reel Qty	G	H	I	J	K	L	M	
Φ1.5	4.0	8.0	5.5	12.0	1.5	1,000	2.0	Φ13	Φ21	Φ62	Φ180	13.5	2.0	



Reference / Comments	Title / Description: O5LS SERIES STANDARD SPECIFICATIONS		
 © Copyright 2017 Fox Electronics. All rights reserved.	Drawing Number: 101137		Size: A
	Part Number:		Cage: 61429
	Draftsperson: CMR		Approved: BEC
			Date: 08/21/2017



5.0x3.2mm LVDS Oscillator

O5LS DATASHEET
(Former F540D, F530D series)

Ordering Information - Available Options & Part Identification*

Example: F O5LS C D M 125.0

F	O5LS	C	D	M	125.0
Fox	Model Number	Voltage <u>J = 2.5V±10%</u> <u>C = 3.3V±10%</u>	Stability <u>A = 100PPM</u> <u>B = 50PPM</u> <u>D = 25PPM</u> <u>E = 20 PPM</u>	Temp Code <u>F = -20 to +70°C</u> <u>M = -40 to +85°C</u>	Frequency (MHz)

*Not all frequencies in the frequency range, or every combination of stability, temp range, and voltage available.



Corporate Headquarters
5570 Enterprise Parkway
Fort Myers, FL 33905
<http://www.FOXONLINE.com>

Sales
1-888-GET-2-FOX (1-888-438-2369)
or
1-239-693-0099
<http://www.FOXONLINE.com/repdisty>

Tech Support
<http://www.FOXONLINE.com/email>

Product use: Fox Electronics reserves the right to modify the products and/or specifications described herein at any time and at Fox Electronics' sole discretion. All information in this document, including descriptions of product features and performance, is subject to change without notice. Performance specifications and the operating parameters of the described products are determined in the independent state and are not guaranteed to perform the same way when installed in customer products. The information contained herein is provided without representation or warranty of any kind, whether express or implied, including, but not limited to, the suitability of Fox Electronics' products for any particular purpose, an implied warranty of merchantability, or non-infringement of the intellectual property rights of others. This document is presented only as a guide and does not convey any license under intellectual property rights of Fox Electronics or any third parties.

Fox Electronics' products are not intended for use in applications involving extreme environmental conditions or in life support systems or similar devices where the failure or malfunction of a Fox Electronics product can be reasonably expected to significantly affect the health or safety of users. Anyone using a Fox Electronics product in such a manner does so at their own risk, absent an express, written agreement by Fox Electronics.

Fox Electronics and the Fox logo are registered trademarks of Fox Electronics. Product specification is subject to change without notice. Other trademarks and service marks used herein, including protected names, logos and designs, are the property of Fox Electronics or their respective third party owners.

Reference / Comments	Title / Description: O5LS SERIES STANDARD SPECIFICATIONS		
	Drawing Number: 101137		Size: A
	Part Number:		Cage: 61429
	Draftsperson: CMR	Approved: BEC	Date: 08/21/2017

© Copyright 2017 Fox Electronics. All rights reserved

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [fox manufacturer](#):

Other Similar products are found below :

[277LF-27-7](#) [278LF-33.1776-1 TR](#) [220-10-7 TR](#) [278LF-20-29](#) [603-25-132 TR](#) [218-20-17966](#) [278LF-5-11](#) [117-102.6494](#) [589-33.33-3 TR](#)
[218-25-94](#) [FD-25](#) [FOXLF049-20](#) [FOXSDLF/240F-20](#) [FXO-HC736R-125](#) [FO5LSCDM100.00](#) [FOX924B-10.000](#) [FOXSDLF/240F-20/TR](#)
[F4105R-250](#) [HC49ULF-11.0592MHz](#) [FOXSDLF/040R/TR](#) [VCS25AXT-447](#) [FOXLF098-20](#) [70M15A](#) [FO7HHAAM32.0](#) [FO7HHAAM20.0-](#)
[BULK](#) [FO7HSCDM50.0](#) [FC7BSCCMM6.0-T1](#) [FOXSLF/120-20](#) [VCS25AXT-270 27.000MHZ](#) [FOX801BELF-160](#) [FOXLF250F-20](#)
[FOXSDLF/049-20/TR](#) [FXO-LC735RGB-156.25](#) [FOXSDLF/245FR-20/TR](#) [FOXSDLF/200-20/TR](#) [FO7HSCBM3.579545-BULK](#)
[FC3VREEEM38.4-T1](#) [FOX923CH-19.20M](#) [FXO-HC735-48](#) [FO7HSCAE48.0-BULK](#) [FOXSDLF/184-20](#) [F1100E-48.000MHZ](#) [FOXLF221-](#)
[20](#) [F535L-24](#) [FO7HSCDM25.0-BULK](#) [FO7HSCDM20.0-BULK](#) [FOX/073-20-LF](#) [FXO-PC536R-150](#) [FOXSLF041](#) [F4100-75.00](#)