

## GENERAL DESCRIPTION

The ZLX-4312-05 is a fixed frequency synthesizer in an industry standard, surface mount package (0.6" Square). Part of EM Research's small footprint series, this ZLX features excellent phase noise and a fixed frequency output of 4312 MHz.



## ZLX-4312-05 FEATURES

- Industry standard, surface mount package (0.6" Square)
- Excellent phase noise
- Internal programming
- Output power of +5 dBm
- Harmonics less than -15 dBc

## ZLX SERIES OPTIONS

- Fixed frequencies up to 8.3 GHz
- Internal Reference
- Output power up to +10 dBm
- Inquire for Additional Options

## ELECTRICAL SPECIFICATIONS

Frequency	4312 MHz	
Stability	Same as Reference	
Reference	100 MHz, 3 dBm $\pm$ 2 dB	
Ref. Input Imp.	50 $\Omega$	
Phase Noise	10 KHz	<-90 dBc/Hz
	100 KHz	<-118 dBc/Hz
	1 MHz	<-140 dBc/Hz
Output Power	+5 dBm $\pm$ 2 dB, 50 $\Omega$	

## APPLIED INDUSTRIES



SatCom



Aerospace



Military



Aviation and  
Unmanned Systems

## ZLX SERIES TYPICAL APPLICATIONS

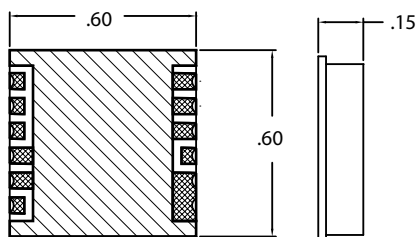
- Satellite Communications Networks
- Military Applications
- Aviation and Unmanned Systems
- Aerospace

Harmonics	<-15 dBc
Spurs	<-70 dBc
VCC-PLL	+5 V $\pm$ 0.15 V @ 20 mA TYP
VCC-VCO	+5 V $\pm$ 0.15 V @ 57 mA TYP
Lock Detect	5V TTL, HIGH=LOCK

All specifications are typical unless otherwise specified and subject to change without notice.



## PACKAGE OUTLINE



BOTTOM VIEW



TOP VIEW

## PIN DESCRIPTIONS

1-3	GND	8-9	GND
4	REF IN	10	RF OUT
5-6	GND	11	VCC-PLL
7	VCC-VCO	12	LOCK

## MECHANICAL SPECIFICATIONS

Package	SMT, 0.6" x 0.6" x 0.15"
Package Outline	EM Drawing 2200013001
Part Label	EM Drawing 8000026001

All dimensions are in inches unless otherwise specified  
.XX = +/- 0.01.

## ENVIRONMENTAL SPECIFICATIONS

Standard Operating Temperature	-30°C to +70°C
Optional Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C

Custom designs are available. Please contact EM Research.

#### DETAILS

Title	Fixed Frequency Synthesizer Part No. ZLX-4312-05
File	SPC-ZLX-4312-05-REVA
Scale	N/A
Size	A
Rev.	A

#### APPROVALS

Department	Date
DWN: Kieley Smith	6/19/23
QA: Susan Zandonella	6/16/23
MKTG: Nick Hicks	6/8/23
ENG: Matt Anthony	6/13/23
MFG: Louie Macias	5/16/23
Other:	

#### REVISION HISTORY

Rev.	Description	Date	Approved
A	Configurable Product	6/19/23	DCR# 2305434

#### NOTES