

GENERAL DESCRIPTION

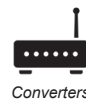
HFS-5560-03 is a fixed-frequency synthesizer that produces a fixed frequency of 5560 MHz. This surface mount synthesizer has excellent phase noise and low spurious.



HFS-5560-03 FEATURES

- Surface Mount Package (1.25" x 1.00" x 0.24")
- Fixed Frequency at 5560 MHz
- No Programming Necessary
- Demo Board Available

APPLIED INDUSTRIES



HFS SERIES OPTIONS

- Fixed frequencies from 50 to 15000 MHz
- Broadband Designs Available
- Internal Reference Output Available
- Optional Internal Reference
- Optional Reference Detect Switch

HFS SERIES TYPICAL APPLICATIONS

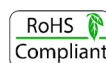
- Radar Systems
- Frequency Conversions
- High Performance Compact Instrumentation
- Converters
- Electronic Countermeasures

ELECTRICAL SPECIFICATIONS

Frequency	5560 MHz	
Stability	Same as reference	
Reference	100 MHz, +3 dBm ±3 dB	
Ref Input Imped.	50 Ω	
Ref. Phase Noise	100 Hz	<-130 dBc/Hz
	1 KHz	<-150 dBc/Hz
	10 KHz	<-155 dBc/Hz
Output Power	+10 dBm ±2 dB, 50 Ω	
Harmonics	<-25 dBc TYP, <-20 dBc MAX	

Sub-Harmonics	<-25 dBc TYP, <-20 dBc MAX	
	@ Fout ± (1/2 Fout)	
Spurs	<-65 dBc TYP, <-60 dBc MAX	
Phase Noise	10 kHz	<-100 dBc/Hz TYP, <-95 dBc/Hz MAX
	100 kHz	<-120 dBc/Hz TYP, <-115 dBc/Hz MAX
	1 MHz	<-135 dBc/Hz TYP, <-130 dBc/Hz MAX
D-VCC	+3.3V ±0.15V @ 25mA TYP, 30 mA MAX	
A-VCC	+5V ±0.15V @ 140mA TYP, 145 mA MAX	
Lock Detect	3.3V TTL, HIGH=LOCK	

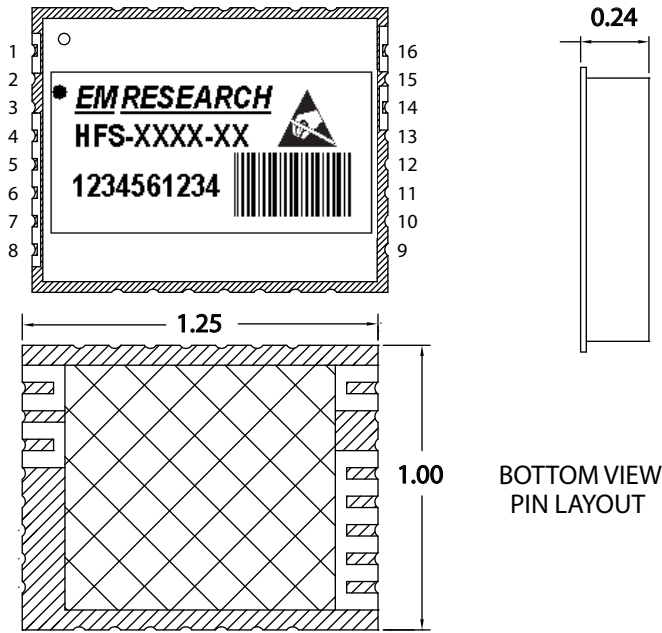
All specifications are typical unless otherwise specified and subject to change without notice.



HIGHEST QUALITY • COMPREHENSIVE SERVICE • BEST PERFORMANCE

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PACKAGE OUTLINE



PIN DESCRIPTIONS

1	D-VCC	9-13	GND
2-3	GND	14	RF OUT
4	LOCK	15	GND
5-7	NC	16	A-VCC
8	REF IN		

MECHANICAL SPECIFICATIONS

Package	Surface Mount, 1.25" x 1.00" x 0.24"
Package Outline	EM Drawing 2200009001
Part Label	EM Drawing 8000019001

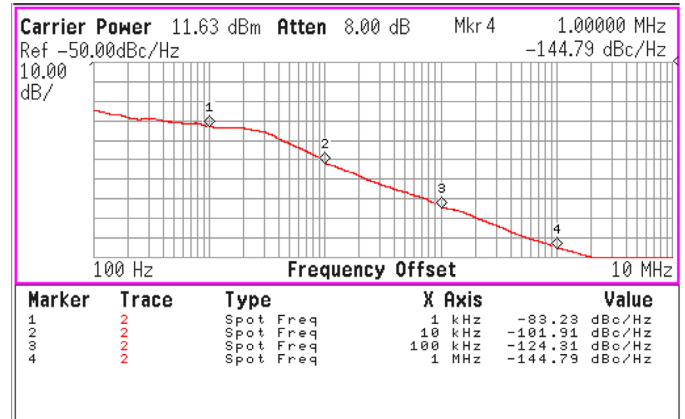
All dimensions are in inches unless otherwise specified
.XX = +/- 0.01

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-30°C to +70°C
Optional Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C

Custom designs are available. Please contact EM Research.

PHASE NOISE





DETAILS

Title	Fixed-Frequency Synthesizer Part No. HFS-5560-03
File	SPC-HFS-5560-03-REVA
Scale	N/A
Size	A
Rev.	A

APPROVALS

Department	Date
DWN: Kielely Smith	2/22/21
QA: Susan Zandonella	12/15/20
MKTG: Sandi Renden	12/28/20
ENG: Matt Anthony	2/2/21
MFG: Nick Hicks	12/15/20
Other: Connor VanKalmthout	02/18/21

REVISION HISTORY

Rev.	Description	Date	Approved
A	Configurable Product	02/18/21	DCR# 2004669

NOTES