

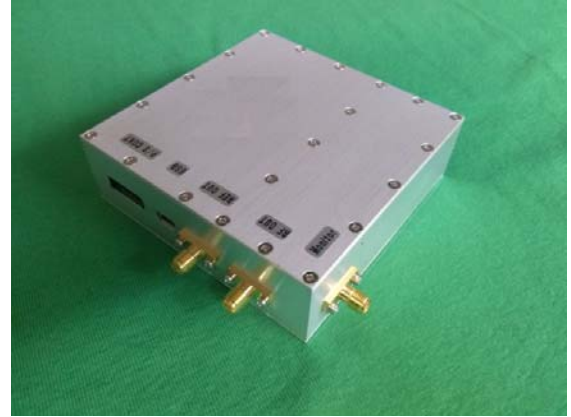
N-DCN-DC103-102 (V2) – IR

X-Band Frequency Synthesizer
RoHS

Rev. E

Features

- * Extremely Low Close-in Phase Noise : $\leq -95\text{dBc/Hz @ } 100\text{Hz offset}$
- * Internal Reference : 1GHz OXCO
- * High Frequency Stability : $5 \times 10\text{E-}8$
- * High Immunity to Phase Hits
- * Control Interface : 3-Wires Serial Data, USB/UART
- * Operation Mode : CW, FM Chirp, Frequency Hopping
- * Compact Package : 90 x 90 x 28 mm
3.54 x 3.54 x 1.1 inch



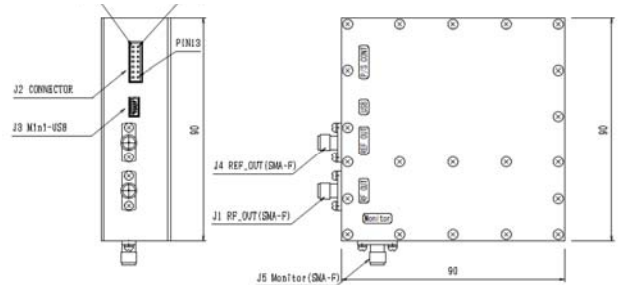
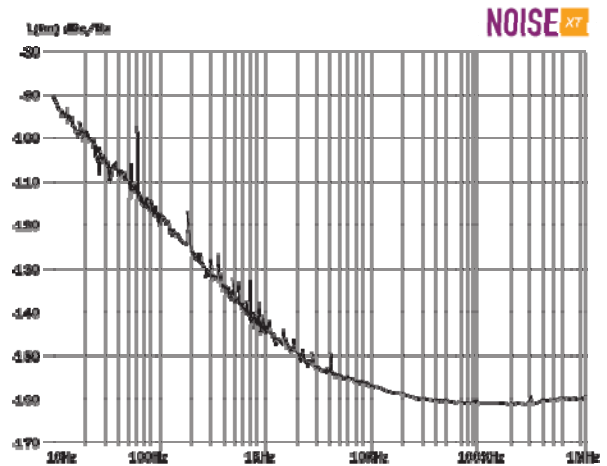
Typical Performance

Frequency Range	9.0 to 10.0GHz
Step Size	1MHz ⁽¹⁾
Output Power	+12dBm ⁽²⁾
Phase Noise	$\leq -95\text{dBc/Hz @ } 100\text{Hz}$ $\leq -105\text{dBc/Hz @ } 1\text{KHz}$ $\leq -120\text{dBc/Hz @ } 10\text{KHz}$ $\leq -123\text{dBc/Hz @ } 100\text{KHz}$
Spurious, Harmonics	-35dBc
Non-Harmonics	-65dBc
Frequency Stability	$5 \times 10\text{E-}8$
-30 to +70°C	
Control Interface	3-wires, Serial Data USB/UART Format
DC Power	+15V, 900mA Max -5V, 50mA Max
Operating Temp. Range	-40 to +80°C

Option

- (1) Small step down to 1KHz is also available.
- (2) Output Power, +6 to +20dBm is available.
- (3) RF Monitor Output -20dBc, Ref. Output 100MHz or 10MHz are available.

Internal Reference: 1GHz Output Frequency



J2 (DF11-140P-20S (52) (SHROSE))		J3 XFD-0514 (SMB06)	
PIN No.	FUNCTION	PIN No.	FUNCTION
1	+15.0V	1	VBIAS
2	GND	2	D-
3	-5.0V	3	D+
4	GND	4	NC
5	DIRH	5	GND
6	DIRC		
7	DIRD		
8	ACK		
9	CTHB_1		
10	CTHB_2		
11	PROF_1LE0		
12	PROF_1LE1		
13	PROF_1LE2		
14	LD		

RoHS