

APPROVAL SECTION

DESCRIPTION : NAALBCWHNF
 NOMINAL FREQ. : 10.000000MHz
 TAITIEN P/N : NA-10M-032
 ISOTEMP P/N : N/A
 REVISION : 1.0
 DATE :

QA
Checked
Prepared

Customer Signature
 Approved :
 Date :
 CUSTOMER : PLANETE
 CUSTOMER P/N :

CONTENT

SPECIFICATIONS	DRAWING NO.	PAGE
ELECTRICAL SPECIFICATIONS	NA-10M-032	2-3
TEST CIRCUIT		
OUTPUT WAVEFORM		
REFLOW PROFILE		
DIMENSIONS	M-125-607-N	4
IDENTIFICATION		
PACKAGING		

ATTACHMENT

TESTING DATA
 ELECTRICAL CHARACTERISTICS
 TEMPERATURE CHARACTERISTICS
 PHASE NOISE & SHORT TERM AGING
OTHER DATA

Rev.	Revised Page	Revision Content	Date	ECO. NO.	DWN By	CHK.By	APV.By
1.0	N/A	Initial Released	03/02/2015	N/A	CL	SY	IMYeh
1.0	N/A	The voltage was 3.3V	04/16/2015	N/A	CL	SY	IMYeh

■ ELECTRICAL SPECIFICATIONS

1. OUTPUT (PIN = "R.F. OUTPUT")

	Parameter	Min.	Typ.	Max.	Units	Test Condition
1.1.	Frequency	10.000000			MHz	
1.2.	Initial Accuracy	-0.1		+0.1	ppm	@ +25 ±1°C after turn on power 15 ±1 minutes ≤ 90 days following date code VCO Input voltage @ +2.5 ±0.001V
1.3.	Waveform	Sine wave				
1.4.	Level	+2			dBm	
1.5.	Load	50			Ω	
1.6.	Harmonic			-30	dBc	
1.7.	Spurious			-60	dBc	

2. FREQUENCY STABILITY

	Parameter	Min.	Typ.	Max.	Units	Test Condition
2.1.	Ambient	-10		+10	ppb	-20°C to +70°C referenced to +25°C
2.2.	Aging	-1		+1	ppb	per day, at time of shipment
	daily	-1		+1	ppb	after 30 days
	yearly	-100		+100	ppb	
	10 years	-0.5		+0.5	ppm	
2.3.	Voltage	-2		+2	ppb	±5% change
2.4.	Short term			0.1	ppb/s	root Allan variance
2.5.	Load	-2		+2	ppb	±10% change
2.6.	Warm-up	-30		+30	ppb	in 3 minutes @ +25 ±1°C referenced to 1 hour
2.7.	Phase noise			-90	dBc/Hz	@ 1Hz
				-120	dBc/Hz	@ 10Hz
				-140	dBc/Hz	@ 100Hz
				-145	dBc/Hz	@ 1kHz
				-150	dBc/Hz	@ 10kHz

3. ELECTRICAL FREQUENCY ADJUSTMENT (PIN = "VCO INPUT")

	Parameter	Min.	Typ.	Max.	Units	Test Condition	
3.1.	Range			-0.7	ppm	VCO @ 0V	Referenced to frequency at nominal
		+0.7			ppm	VCO @ 5V	Center Voltage
3.2.	Control	0		+5	V		
3.3.	Slope	Positive					
3.4.	Center Voltage		+2.5		V	When not connected, VCO INPUT is internally held at this voltage	
3.5.	Linearity	-10		+10	%		
3.6.	Input Impedance	100			kΩ		

4. INPUT POWER (PIN = "+VDC")

	Parameter	Min.	Typ.	Max.	Units	Test Condition	
4.1.	Voltage	+11.4	+12	+12.6	V		
4.2.	Current			300	mA	@ turn on	
4.3.	Steady state			1.2	W	@ +25°C	

5. REFERENCE VOLTAGE (PIN="REFERENCE VOLTAGE"), an output

	Parameter	Min	Typ.	Max.	Units	Test Condition	
5.1.	Voltage	+4.9	+5.0	+5.1	V	Over temperature range in 2.1.	
5.2.	Load	1			kΩ		

6. ENVIRONMENTAL

	Parameter	Reference Std.	Test Condition
6.1.	Storage temperature	-40°C to +75°C	
6.2.	Humidity	MIL-STD-202, Method 103, Test Condition A	95% RH @ +40°C, non-condensing, 240 hours
6.3.	Vibration (non-operating)	MIL-STD-202, Method 201	0.06" Total p-p, 10 to 55 Hz
6.4.	Shock (non-operating)	MIL-STD-202, Method 213, Test Condition J	30g, 11ms, half-sine

PRODUCT DIMENSIONS

