Customer Code : _____

DATASHEET

DAPU P/N: **O22B-Q446-10.00MHz-A**

Customer P/N: _____

DAPU			Customer Approval
Drew	Audited	Approved	
Amway.wei	Tony · Wang	James.Liu	
Date: 2015.06.19			Stamp, please! Thanks!

Guangdong Dapu Telecom Technology Co.,Ltd

Bldg13-16,.N.Ind.Zone,SSL Industry Park, Dongguan City, Guangdong Province, China

TEL：0086-0769-88010888 FAX：0086-0769-81800098

Bldg13-16,.N.Ind.Zone,SSL Industry Park, Dongguan City, Guangdong Province, PR China
TEL:0086-0769-88010888
FAX:0086-0769-81800098

Table of amendment

Version	Revision contents	Prepared by	Revised date
1.0	The first issued	Amway	2015.06.16
1.1	"Vref Out" added "Phase Noise" and "Pin Function" changed	Amway	2015.06.19

Bldg13-16,.N.Ind.Zone,SSL Industry Park, Dongguan City, Guangdong Province, PR China
TEL:0086-0769-88010888
FAX:0086-0769-81800098

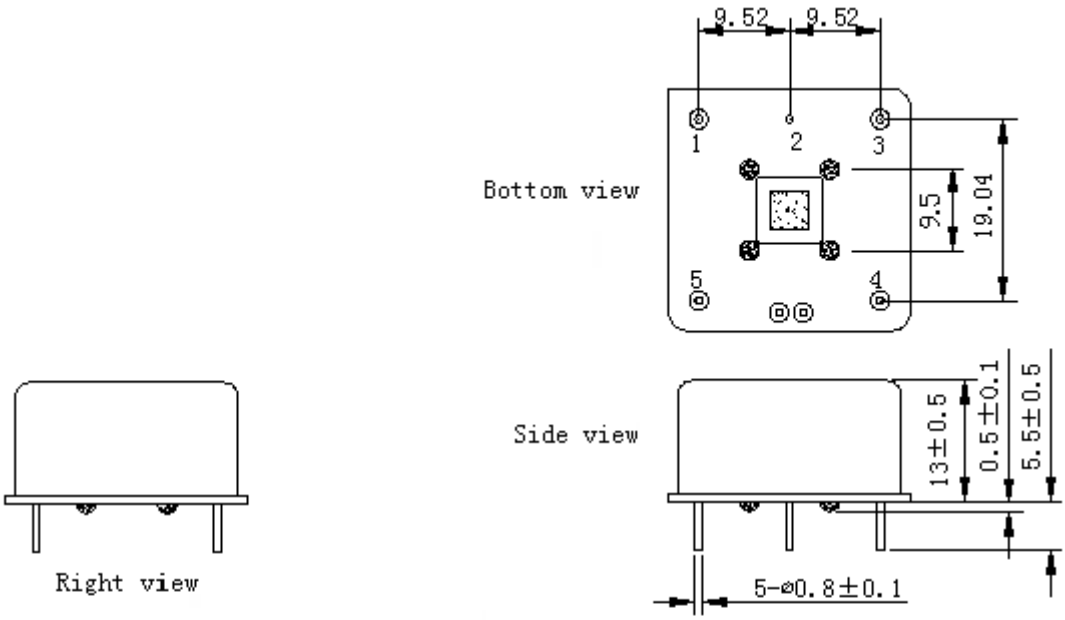
1. Electrical Parameters

MODEL：O22B-Q446-10.00MHz-A						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		10.00		MHz	
	Output Waveform		Sine wave			
	Level	3		7	dBm	
	Load		50		Ω	
	Harmonics Suppression			-30	dBc	
	Spurious Suppression			-70	dBc	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-5		+5	$\times 10^{-9}$	T_A varied from 0℃ to 70℃, measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2$, V_{cc}=12.0V, V_c=2.5V, O_{load}=50Ω, temperature variable speed less than 2℃per minute.
	Initial Frequency Tolerance	-0.05		+0.05	$\times 10^{-6}$	Measurement referenced to frequency observed with T_A=25℃, V_{cc}=12.0V, V_c=2.5V and after 15 minutes of operation, within 30 days after ex-works.
	Frequency Tolerance vs. supply voltage	-3		+3	$\times 10^{-9}$	measurement referenced to frequency observed T_A=25℃, V_{cc} varied from 11.4V to 12.6V, V_c=2.5V, O_{load}=50Ω.
	Frequency Tolerance vs. Load	-2		+2	$\times 10^{-9}$	5% Load Change Measurement referenced to frequency observed with T_A=25℃, V_{cc}=12.0V, V_c=2.5V, O_{load}=50Ω.
	Short Term Stability			0.01	$\times 10^{-9}$	Temperature stability, no EMI\EMC or other interference, test after power for 1hour ref. to 25℃; 1s, using PN9000 equipment.
	Aging Tolerance per day	-0.5		+0.5	$\times 10^{-9}$	V_{cc},V_c, T_A constant Measurement referenced to frequency observed with T_A=25℃, V_{cc}=12.0V, V_c=2.5V, O_{load}=50Ω and after 30 days of operation.
	Aging Tolerance per month	-0.015		+0.015	$\times 10^{-6}$	
	Aging Tolerance 1Year	-0.075		+0.075	$\times 10^{-6}$	
	Aging Tolerance 15Years	-0.5		+0.5	$\times 10^{-6}$	
Power Supply	Supply Voltage	11.4	12.0	12.6	V	
	Steady Consumption			125	mA	@25℃
	Warm up current			300	mA	
	Vref Out	4.8	5.0	5.2	V	

Bldg13-16,.N.Ind.Zone,SSL Industry Park, Dongguan City, Guangdong Province, PR China
TEL:0086-0769-88010888
FAX:0086-0769-81800098

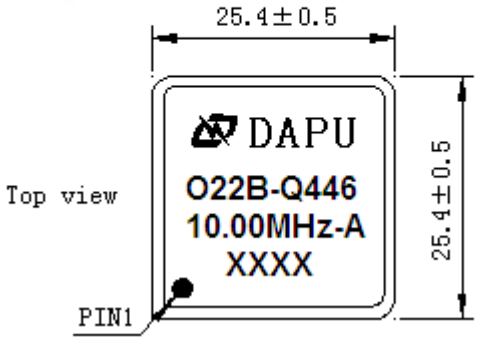
	Warm-Up Time			2	minutes	@25℃within $\pm 0.1\times10^{-6}$ of final frequency with reference after 1 hour on.
Voltage Control Characteristics	Frequency Tuning Range	-0.9		-0.6	$\times10^{-6}$	V_c=0V. measurement referenced to V_c=2.5V.
		-0.05		+0.05	$\times10^{-6}$	V_c=2.5V. measurement referenced to exactly 10.00MHz.
		+0.6		+0.9	$\times10^{-6}$	V_c=5.0V. measurement referenced to V_c=2.5V.
	Linearity			10	%	
	Slope	Positive				
	Input Impedance	100			KΩ	
Phase Noise	Phase Noise @25℃		-95	-85	dBc/Hz	1Hz
			-125	-115		10Hz
			-150	-145		100Hz
			-160	-155		1KHz
			-160	-155		10KHz
Environmental Conditions	Operable Temperature	-40		+85	℃	
	Storage Temperature	-55		+105	℃	
	ESD Level	Human Body Model, class2: 2000V to 4000V; ANSI/ESDA/JEDEC JS-001-2010.				
		Machine Model, class B: 200V to 400V; ANSI/ESDA/JEDEC JS-001-2010.				
	Moisture Sensitivity Level	Not humidity sensitive.				
	Vibration	Test Condition: 0.75mm ;acceleration:10g;10Hz～500Hz, one cycle per 30 min, test 2 hour. (3 times for each 3 directions X ,Y , Z)，IEC 68-2-06 Test Fc.				
	Shock	50g；11ms；half sine wave (3 times for each 3 directions X ,Y, Z),IEC 68-2-27 Test Ea/Severity 50A.				
Full Package Storage	Relative humidity (%)	20%～70%				
	Temperature (℃)	-10~35℃				

2. Mechanical Structure (mm)



PIN FUNCTION

PIN	NOTATION	FUNCTION
1	OUTPUT	RF Output
2	GND	GND
3	VC	Control Voltage
4	VREF	Reference Output Voltage
5	VCC	Supply Voltage



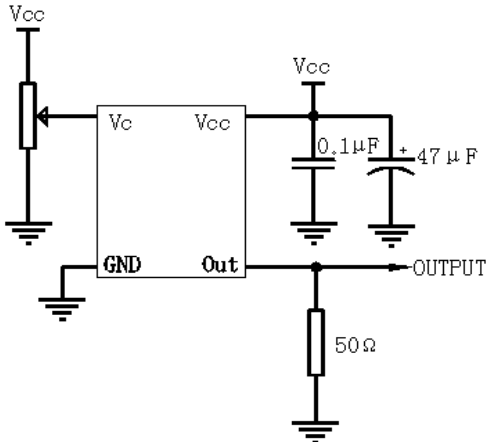
Note1: Tolerance ±0.20mm without mark

Note2: The first two xx representative: week
After two xx representative: year

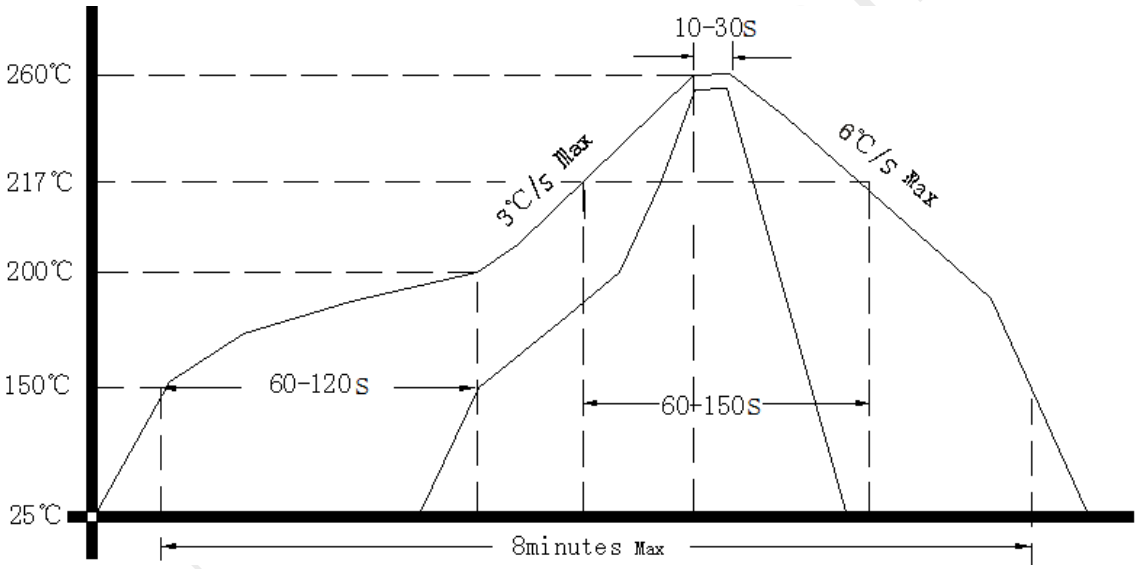
Note3: Referential Weight 13.6g

Bldg13-16,.N.Ind.Zone,SSL Industry Park, Dongguan City, Guangdong Province, PR China
TEL:0086-0769-88010888
FAX:0086-0769-81800098

3. Test Circuit



4. Reflow Soldering Curve (RoHS)



5. Package(mm)