Customer Code : _____

DATASHEET

DAPU P/N: **O22B-L428-100.00MHz**

Customer P/N: _____

DAPU			Customer Approval
Drew	Audited	Approved	Stamp, please! Thanks!
Amway.wei	Tony·Wang	Jason Zhao	
Date: 2020.07.28			

Guangdong Dapu Telecom Technology Co.,Ltd

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

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

Bldg 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	2020.07.28

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

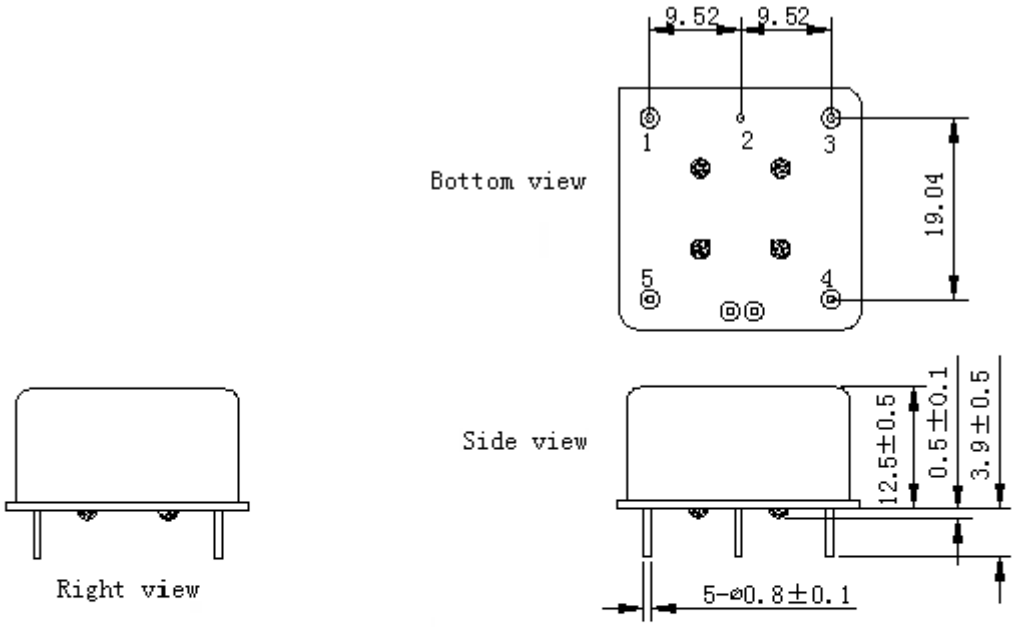
1. Electrical Parameters

MODEL： O22B-L428-100.00MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		100.00		MHz	
	Output Waveform		Sine wave			
	Level	6			dBm	
	Load		50		Ω	
	Harmonics Suppression			-30	dBc	
	Spurious Suppression			-80	dBc	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.05		+0.05	$\times 10^{-6}$	T_A varied from-20℃ to 75℃, measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2$, V_{cc}=5.0V, O_{load}=50Ω, temperature variable speed less than 2℃per minute.
	Initial Frequency Tolerance	-0.2		+0.2	$\times 10^{-6}$	Measurement referenced to frequency observed with T_A=25℃, V_{cc}=5.0V, V_c=1.65V and after 15 minutes of operation, within 30 days after ex-works.
	Frequency Tolerance vs. supply voltage	-0.01		+0.01	$\times 10^{-6}$	Measurement referenced to frequency observed T_A=25℃, V_{cc} varied from 4.75V to 5.25V, V_c=1.65V, O_{load}=50Ω.
	Frequency Tolerance vs. Load	-0.01		+0.01	$\times 10^{-6}$	5% Load Change Measurement referenced to frequency observed with T_A=25℃, V_{cc}=5.0V, V_c=1.65V, O_{load}=50Ω.
	Short Term Stability			0.05	$\times 10^{-9}$	Temperature stability, no EMI\EMC or other interference, test after power for 1hour ref. to 25℃; 1s.
	Aging Tolerance per day	-5.0		+5.0	$\times 10^{-9}$	V_{cc},V_c, T_A constant Measurement referenced to frequency observed with T_A=25℃,V_{cc}=5.0V, V_c=1.65V, O_{load}=50Ω and after 30 days of operation.
	Aging Tolerance 1Year	-0.3		+0.3	$\times 10^{-6}$	
Power Supply	Supply Voltage	4.75	5.0	5.25	V	
	Steady Consumption			400	mA	@25℃
	Warm up current			800	mA	

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

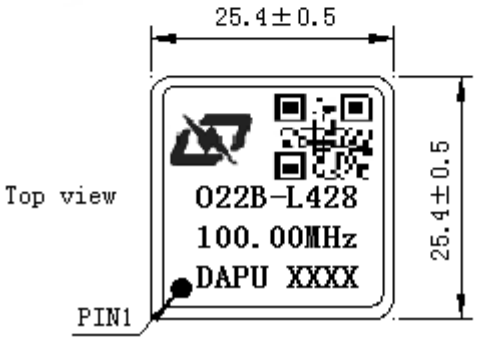
Voltage Control Characteristics	Frequency Tuning Range			-2.0	$\times 10^{-6}$	V_c=0V. measurement referenced to V_c=1.65V.
		-0.2		+0.2	$\times 10^{-6}$	V_c=1.65V. measurement referenced to exactly 100.00MHz.
		+2.0			$\times 10^{-6}$	V_c=3.3V. measurement referenced to V_c=1.65V.
	Linearity			10	%	
	Slope	Positive				
	Input Impedance	100			KΩ	
Phase Noise	Phase Noise		-100	-90	dBc/Hz	10Hz
			-130	-120		100Hz
			-155	-150		1KHz
			-165	-160		10KHz
			-170	-165		100KHz
Environmental Conditions	Operable Temperature	-20		+75	℃	
	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; JEDEC JESD22-A115C.				
	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	NC	Not Connect
5	VCC	Supply Voltage



Note1: Tolerance ±0.20mm without mark

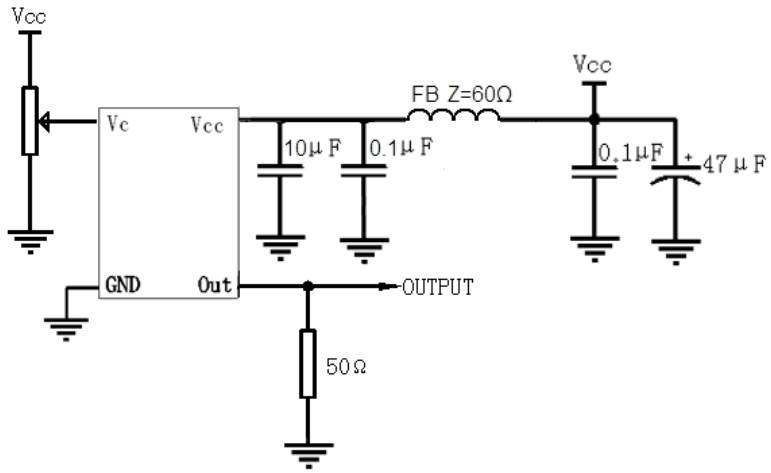
Note2: The first two xx representative: week
After two xx representative: year

Note3: Referential weight 13.6g

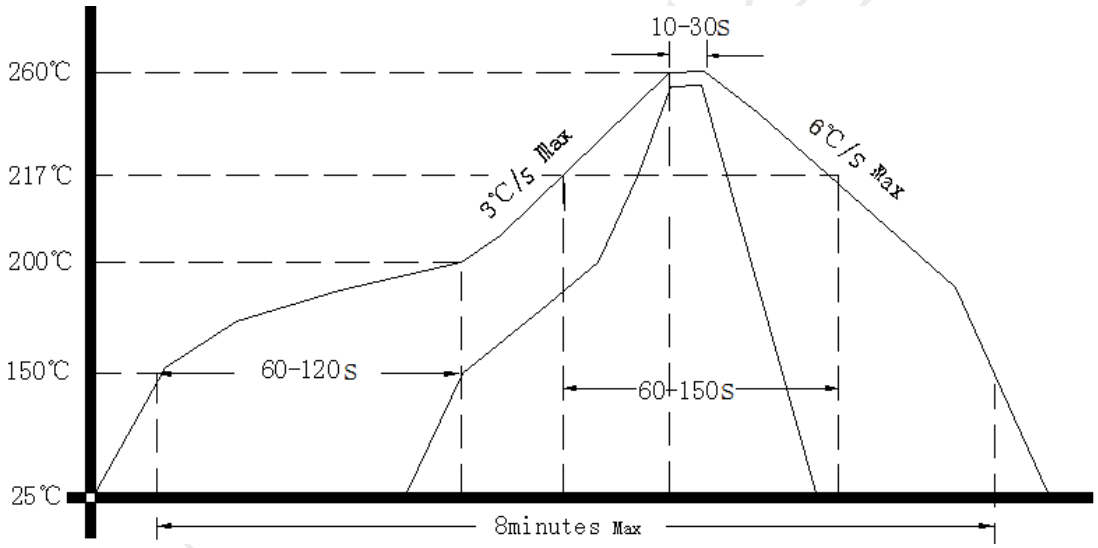
Note4: NC is not connect

Bldg 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)