Customer Code : _____

DATASHEET

DAPU P/N: **O22B-1802-100.00MHz**

Customer P/N: _____

DAPU			Customer Approval
Drew	Audited	Approved	Stamp, please! Thanks!
Amway.wei	Tony·Wang	Jason Zhao	
Date: 2023.07.11			

Guangdong Dapu Telecom Technology Co.,Ltd

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Table of amendment

Version	Revision contents	Prepared by	Revised date
1.0	The first issued	Amway	2023.07.04
1.1	The “Output Waveform” “Frequency Tolerance vs. Operating Temperature Range” “Short Term Stability” “Aging” “Phase Noise” changed	Amway	2023.07.11

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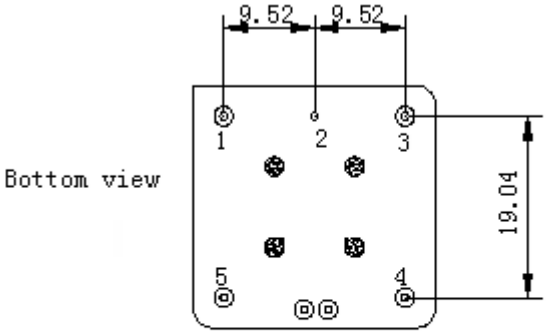
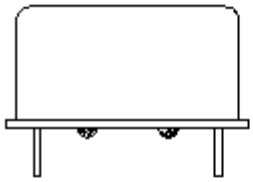
1. Electrical Parameters

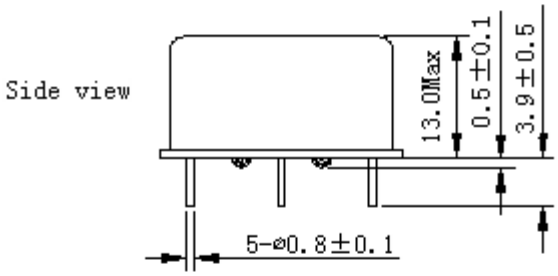
MODEL： O22B-1802-100.00MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		100.00		MHz	
	Output Waveform		Sine wave			
	Level	12	15		dBm	
	Load		50		Ω	
	Harmonics Suppression			-30	dBc	
	Spurious Suppression			-80	dBc	
	Start up Time			1	s	90%V_{CC} to the correct frequency output time
Frequency Stabilities	Frequency Accuracy	-0.2		+0.2	$\times 10^{-6}$	Within 90 days after shipment and 15 minutes warm up time(before reflow), Measurement referenced to nominal frequency
	Frequency Tolerance vs. Operating Temperature Range	-0.2		+0.2	$\times 10^{-6}$	T_A varied from -40℃ to 85℃, 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.
	Frequency Tolerance vs. supply voltage	-10		+10	$\times 10^{-9}$	measurement referenced to frequency observed T_A=25℃, V_{cc} varied from 4.75V to 5.25V, O_{load}=50Ω.
	Frequency Tolerance vs. Load	-10		+10	$\times 10^{-9}$	10% Load Change Measurement referenced to frequency observed with T_A=25℃, V_{cc}=5.0V, 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.
				0.05	$\times 10^{-9}$	Temperature stability, no EMI\EMC or other interference, test after power for 1hour ref. to 25℃; 100s.
	Aging Tolerance per day	-2		+2	$\times 10^{-9}$	V_{cc},V_c, T_A constant Measurement referenced to frequency observed with T_A=25℃,V_{cc}=5.0V, O_{load}=50Ω and after 30 days of operation.
	Aging Tolerance 1Year	-0.2		+0.2	$\times 10^{-6}$	
	Aging Tolerance 10Years	-0.9		+0.9	$\times 10^{-6}$	

Power Supply	Supply Voltage	4.75	5.0	5.25	V	
	Steady Consumption		185	400	mA	@25℃
	Current Consumption during warm up			800	mA	
	Warm-Up Time			5	minutes	@25℃within ±0.1×10^{-6} of final frequency with reference after 1 hour on.
Phase Noise	Phase Noise			-105	dBc/Hz	10Hz
				-135		100Hz
				-160		1KHz
				-170		10KHz
				-176		100KHz
				-176		1MHz
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; 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)

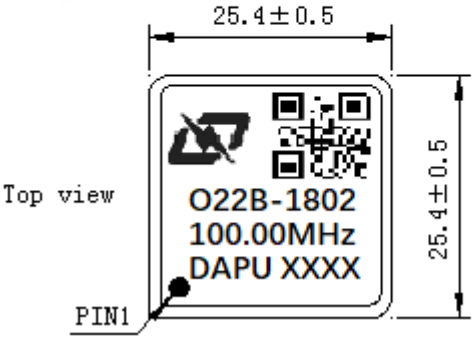






PIN FUNCTION

PIN	NOTATION	FUNCTION
1	OUTPUT	RF Output
2	GND	GND
3	NC	Not Connect
4	NC	Not Connect
5	VCC	Supply Voltage



Note1: Tolerance ± 0.20mm without mark

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

Note3: Referential weight 13.6g

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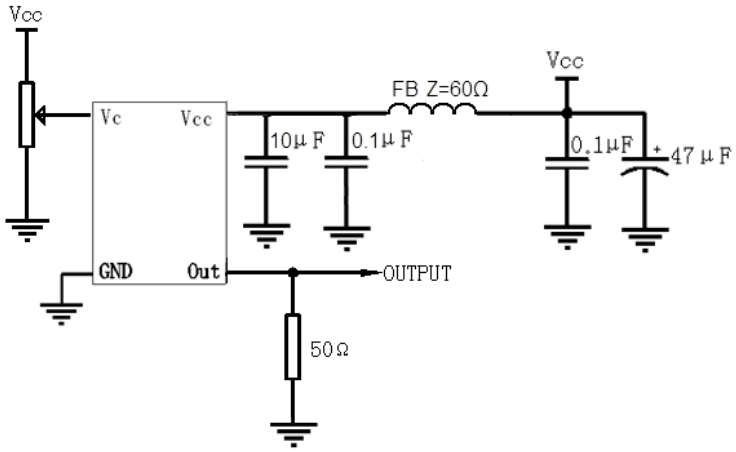
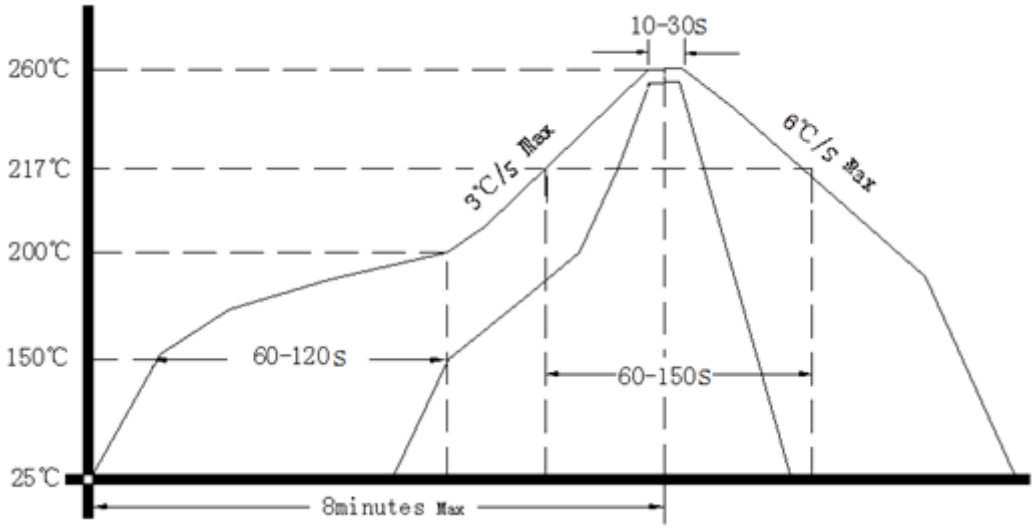
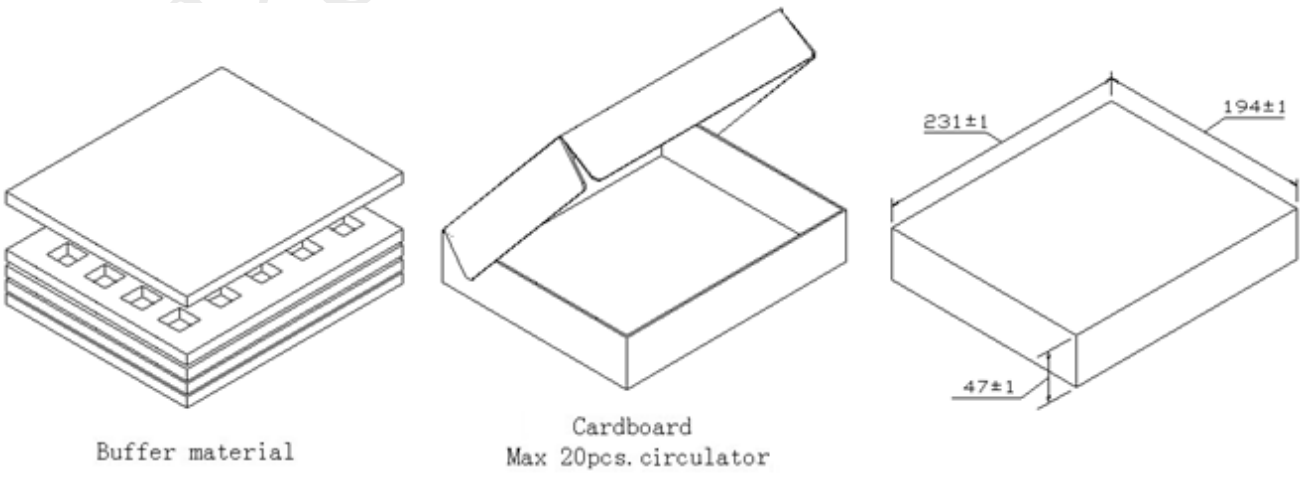
3. Test Circuit



4. Reflow Soldering Curve (RoHS)



5. Package(mm)



Buffer material

Cardboard
Max 20pcs. circulator