Customer Code: _____

DATASHEET

DAPU P/N: **O22B-G445-10.00MHz-B**

Customer P/N: _____

DAPU			Customer Approval
Drew	Audited	Approved	
Amway.wei	Tony · Wang	Jason Zhao	
Date: 2023.04.20			Stamp, please! Thanks!

Guangdong Dapu Telecom Technology Co.,Ltd

Building 5, No.24, Industrial East Road, Songshanhu Park, Dongguan, Guangdong, P.R. China

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

Building 5, No.24, Industrial East Road,
Songshanhu Park, Dongguan,
Guangdong, P.R. 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	2023.04.20

Building 5, No.24, Industrial East Road,
Songshanhu Park, Dongguan,
Guangdong, P.R. China
TEL:0086-0769-88010888
FAX:0086-0769-81800098

1. Electrical Parameters

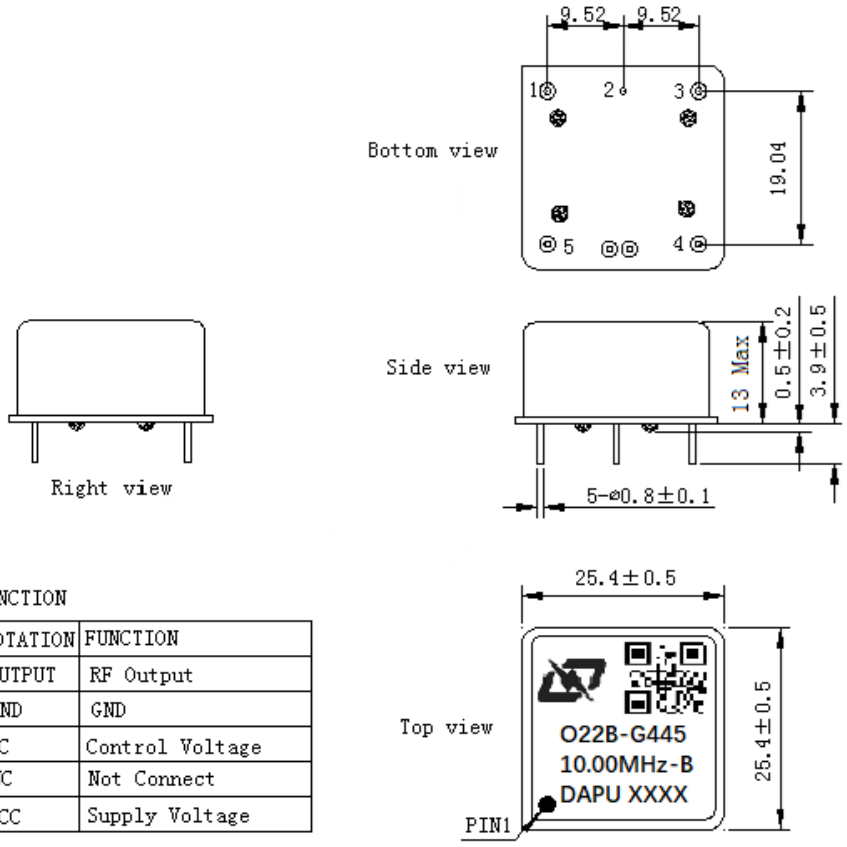
MODEL：O22B-G445-10.00MHz-B

Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		10.00		MHz	
	Output Waveform		Sine wave			
	Level	8			dBm	
	Load		50		Ω	
	Harmonics Suppression			-30	dBc	
	Spurious Suppression			-80	dBc	10Hz to 1MHz from carrier
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.01		+0.01	$\times 10^{-6}$	T_A varied from -20℃ to 70℃, measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2$, Vcc=12V, 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℃, Vcc=12V, V_c=2.5V, and after 15 minutes of operation, within 30 days after ex-works.
	Frequency Tolerance vs. supply voltage	-0.5		+0.5	$\times 10^{-9}$	measurement referenced to frequency observed T_A=25℃, Vcc=10.35V~12.65V, V_c=2.5V, O_{load}=50Ω.
	Frequency Tolerance vs. Load	-0.5		+0.5	$\times 10^{-9}$	5% Load Change Measurement referenced to frequency observed with T_A=25℃, Vcc=12V,V_c=2.5V, O_{load}=50Ω.
	Short-Term Stability: Allan Variance			1	$\times 10^{-12}$	Temperature stability, no EMI\EMC or other interference， test after power for 1hour ref. to 25℃; @1s to 1000s.
	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}= 12V, V_c=2.5V, and after 30 days of operation..
	Aging Tolerance Per Year	-0.05		+0.05	$\times 10^{-6}$	
	Aging Tolerance 10Years	-0.3		+0.3	$\times 10^{-6}$	

Building 5, No.24, Industrial East Road,
Songshanhu Park, Dongguan,
Guangdong, P.R. China
TEL:0086-0769-88010888
FAX:0086-0769-81800098

Power Supply	Supply Voltage	10.35	12.0	12.65	V	
	Steady Consumption			200	mA	@25℃
	Warm up current			400	mA	
	Warm-Up Time			5	min	@25 ℃ within ±0.05 × 10^{-6} power on 5 minutes referred to 1 hour
Voltage Control Characteristics	Frequency Tuning Range			-0.4	×10^{-6}	V_c=0V. measurement referenced to V_c=2.5V
		-0.2		+0.2	×10^{-6}	V_c=2.5V. measurement referenced to exactly 10.00MHz
		+0.4			×10^{-6}	V_c=5V. measurement referenced to V_c=2.5V
	Linearity			10	%	
	Slope	Positive				
	Input Impedance	100			KΩ	
Phase Noise	Phase Noise @25℃			-110	dBc/Hz	1Hz
				-138		10Hz
				-150		100Hz
				-155		1KHz
				-155		10KHz
Environmental Conditions	Operating Temperature	-20		+70	℃	
	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

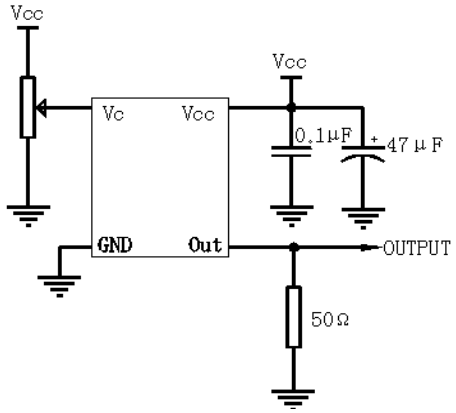
Note1: Tolerance ± 0.2mm without mark

Note2: Referential weight 13.6g

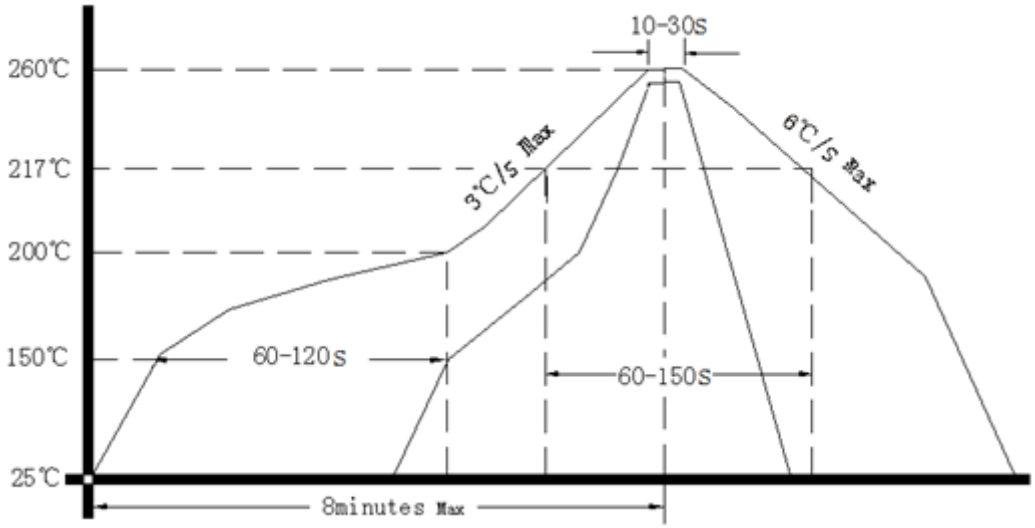
Note3: The first two xx representative: week
After two xx representative: year

Building 5, No.24, Industrial East Road,
Songshanhu Park, Dongguan,
Guangdong, P.R. China
TEL:0086-0769-88010888
FAX:0086-0769-81800098

3. Test Circuit



4. Reflow Soldering Curve (RoHS)



5. Package: Tape & Reel (mm)