Customer Code : _____

DATASHEET

DAPU P/N: **D144-O21L-K425-40.00MHz**

Customer P/N: _____

DAPU			Customer Approval
Drew	Audited	Approved	
Amway.wei	Tony · Wang	Jason Zhao	
Date: 2022.11.04			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	2022.11.04

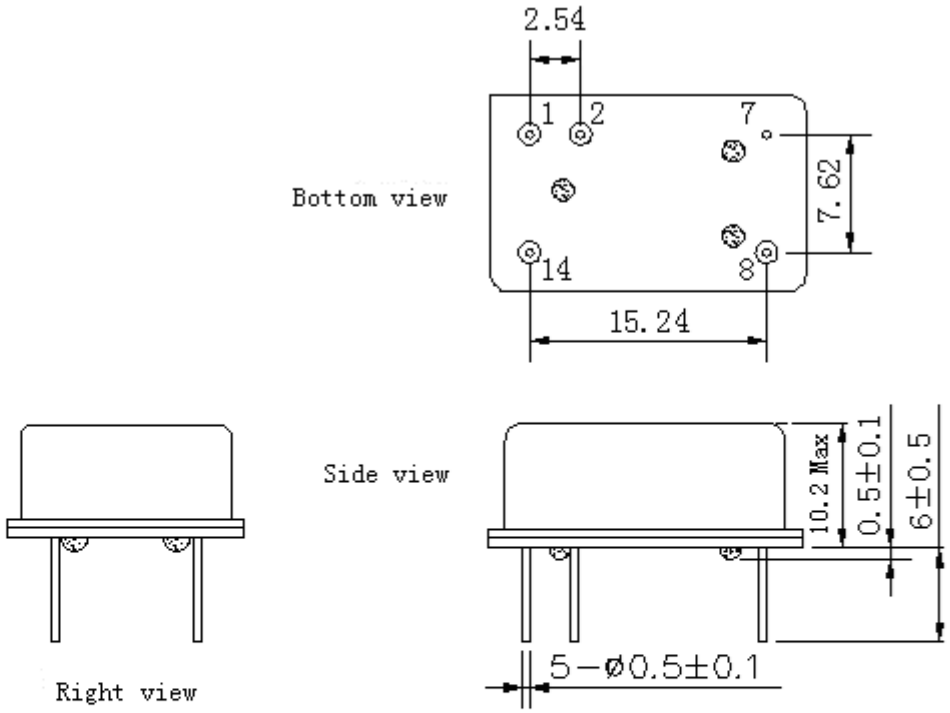
1. Electrical Parameters

MODEL: D144-O21L-K425-40.00MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		40.00		MHz	
	Output Waveform		Sine Wave			
	Level	6	8		dBm	
	Harmonics Suppression			-25	dBc	
	Load		50		Ω	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.05		+0.05	$\times 10^{-6}$	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.
	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=2.1V, and after 5 minutes of operation, within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-2		+2	$\times 10^{-9}$	measurement referenced to frequency observed T_A=25℃, V_{cc} varied from 4.75V to 5.25V, and O_{load}=50Ω.
	G-Sensitivity			±1	$\times 10^{-9}$/G	worst direction.
	Allan Deviation		20		$\times 10^{-12}$	0.1s
	Aging Tolerance Per Day	-1.5		+1.5	$\times 10^{-9}$	V_{cc},T_A constant measurement referenced to frequency observed with T_A=25℃, V_{cc}=5.0V, and after 30 days of operation.
	Aging Tolerance 1 Year	-0.15		+0.15	$\times 10^{-6}$	
Power Supply	Supply Voltage	4.75	5.0	5.25	V	
	Reference Voltage	4.1	4.2	4.3	V	
	Steady Consumption			70	mA	@25℃
	Warm up Current			220	mA	
	Input Resistance		11		kW	
	Input BW		1.6		Hz	-3dB level
	Warm-Up Time			120	S	@-40℃within ±0.1×10^{-6} of final frequency with reference after 30minutes on.
	Warm-Up Time			120	S	@25℃within ±0.05×10^{-6} of final frequency with reference after 30minutes on.

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

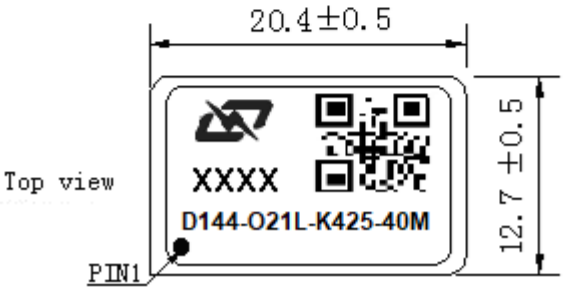
Voltage Control Characteristics	Frequency Tuning Range			-0.5	$\times 10^{-6}$	V_c=0V. measurement referenced to V_c=2.1V
		-0.2		+0.2	$\times 10^{-6}$	V_c=2.1V. measurement referenced to exactly 40.00MHz
		+0.5			$\times 10^{-6}$	V_c=4.2V. measurement referenced to V_c=2.1V
	Linearity			10	%	
	Slope	Positive				
	Input Impedance	100			KΩ	
Phase Noise	Phase Noise		-105	-100	dBc/Hz	10Hz
			-130	-125		100Hz
			-160	-150		1KHz
			-165	-157		10KHz
			-168	-160		100KHz
Environmental Conditions	Operable Temperature	-40		+85	℃	
	Storage Temperature	-55		+125	℃	
	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	VC	Control Voltage
2	VREF	4.2V
7	GND	GND
8	OUTPUT	RF Output
14	VCC	Supply Voltage



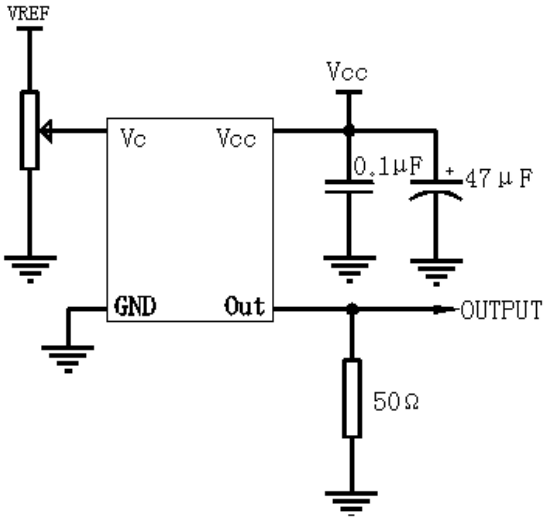
Note1: Tolerance ± 0.2mm without mark

Note2: Referential weight 4.2g

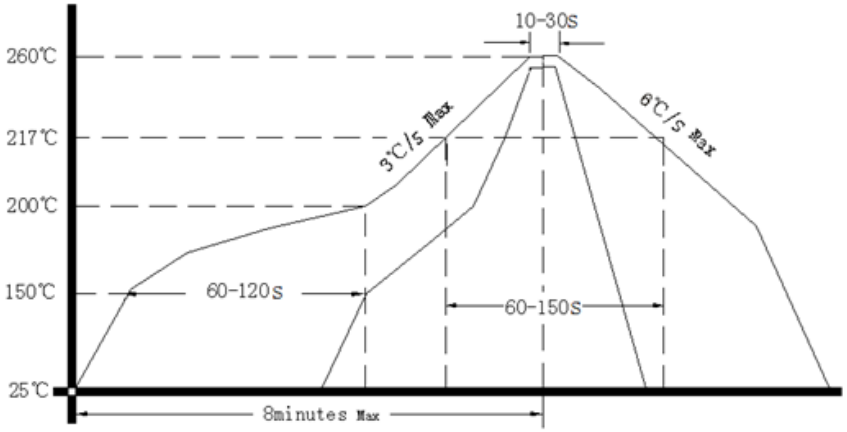
Note3: The first two xx representative: week
After two xx representative: year

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)