

Travelling Merchant: \_\_\_\_\_

# DATASHEET

Standard: 079A-L422-100.00MHz-C

P/N: \_\_\_\_\_

Plot			The Label
Drew	Audited	Approved	Stamp, please! Thanks!
Date: 2024.11.04			

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### Table of amendment

Version	Revision contents	Prepared by	Revised date
1.0	The first issued	<i>Amway</i>	2024.11.04



## 1. Electrical Parameters

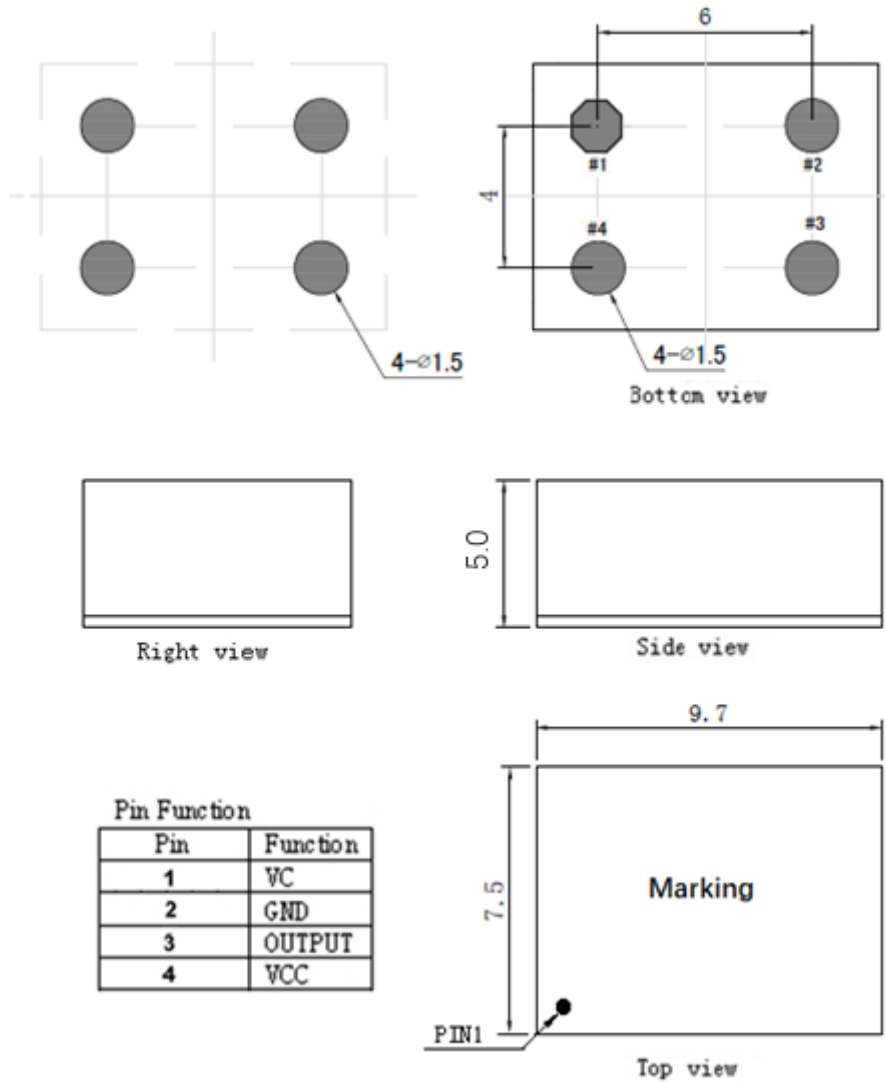
MODEL: O79A-L422-100.00MHz-C						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency	100.00			MHz	
	Output Waveform	Sine wave				
	Level	5		12	dBm	
	Harmonics Suppression			-35	dBc	
	Spurious Suppression			-65	dBc	
	Load	50			$\Omega$	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.05		+0.05	$\times 10^{-6}$	$T_A$ varied from $-55^{\circ}\text{C}$ to $70^{\circ}\text{C}$ , measurement referenced to frequency observed with $f_{\text{ref}}=(f_{\text{max}}+f_{\text{min}})/2$ , $V_{\text{cc}}=5\text{V}$ , $O_{\text{load}}=50\Omega$ , temperature variable speed less than $2^{\circ}\text{C}$ per minute. no wind.
	Initial Frequency Tolerance	-1.5		+1.5	$\times 10^{-6}$	Measurement referenced to frequency observed with $T_A=25^{\circ}\text{C}$ , $V_{\text{cc}}=5\text{V}$ , $V_c=1.65\text{V}$ and after 15 minutes of operation, at time of shipment.
	Frequency Tolerance vs. Supply Voltage	-0.02		+0.02	$\times 10^{-6}$	measurement referenced to frequency observed $T_A=25^{\circ}\text{C}$ , $V_{\text{cc}}$ varied from 4.75V to 5.25V, $V_c=1.65\text{V}$ , $O_{\text{load}}=50\Omega$ .
	Frequency Tolerance vs. Load	-0.02		+0.02	$\times 10^{-6}$	5% Load Change Measurement referenced to frequency observed with $T_A=25^{\circ}\text{C}$ , $V_{\text{cc}}=5\text{V}$ , $V_c=1.65\text{V}$ , $O_{\text{load}}=50\Omega$ .
	G-Sensitivity			1	$\times 10^{-9}/\text{g}$	Gamma vector of all three axes from 30Hz to 1500Hz
	Aging Tolerance Per Day	-5		+5	$\times 10^{-9}$	$V_{\text{cc}}$ , $V_c$ , $T_A$ constant Measurement referenced to frequency observed with $T_A=25^{\circ}\text{C}$ , $V_{\text{cc}}=5\text{V}$ , $V_c=1.65\text{V}$ , $O_{\text{load}}=50\Omega$ and after 30 days of operation.
	Aging Tolerance First Year	-0.5		+0.5	$\times 10^{-6}$	
	Aging Tolerance 10 Years	-3		+3	$\times 10^{-6}$	
Power Supply	Supply Voltage	4.75	5	5.25	V	
	Steady Consumption			120	mA	@ $25^{\circ}\text{C}$
	Warm up current			350	mA	
	Warm up Time			1	min	@ $25^{\circ}\text{C}$ within $\pm 1 \times 10^{-6}$ of final frequency with reference after 15 minutes on.



Voltage Control Characteristics	Frequency Tuning Range			-2	$\times 10^{-6}$	$V_c=0V$ . measurement referenced to $V_c=1.65V$
		-1.5		+1.5	$\times 10^{-6}$	$V_c=1.65V$ . measurement referenced to exactly 100.00MHz.
		+2			$\times 10^{-6}$	$V_c=3.3V$ . measurement referenced to $V_c=1.65V$
	Linearity			10	%	
	Slope	Positive				
	Input Impedance	100				K $\Omega$
Phase Noise	Phase Noise			-90	dBc/Hz	10Hz
				-120		100Hz
				-150		1KHz
				-161		10KHz
				-165		100KHz
				-165		1MHz
Environmental Conditions	Operable Temperature	-55		+70	$^{\circ}C$	
	Storage Temperature	-55		+105	$^{\circ}C$	
	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	Level 3.				
	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 ( $^{\circ}C$ )	-10~35 $^{\circ}C$				



## 2. Mechanical Structure (mm)



Marking:



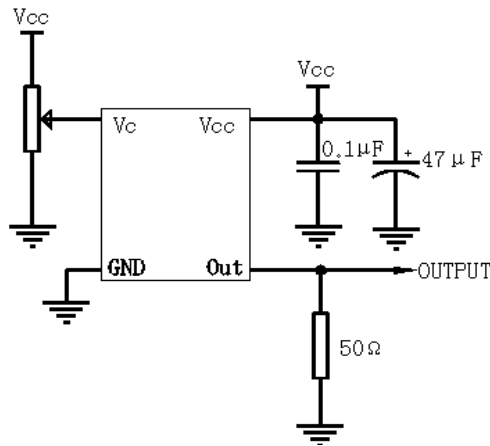
**Note1::** Tolerance  $\pm 0.30\text{mm}$  without mark

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

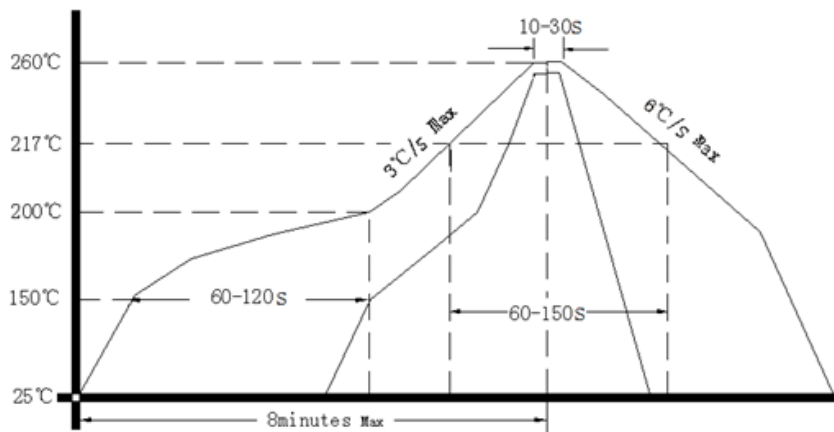
**Note3:** Referential weight 0.7g



### 3. Test Circuit



### 4. Reflow Soldering Curve (RoHS)



Note: Passing through reflow upside down is not supported



### 5. Package: Tape & Reel (mm)

