

Travelling Merchant: _____

DATASHEET

Standard: **O22B-Q429-100.00MHz**

P/N: _____

Plot			The Label
Drew	Audited	Approved	Stamp, please! Thanks!
Date: 2021.10.26			

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Table of amendment

Version	Revision contents	Prepared by	Revised date
1.0	The first issued	<i>Amway</i>	2021.10.08
1.1	The “Mechanical Structure” changed	<i>Amway</i>	2021.10.26



1. Electrical Parameters

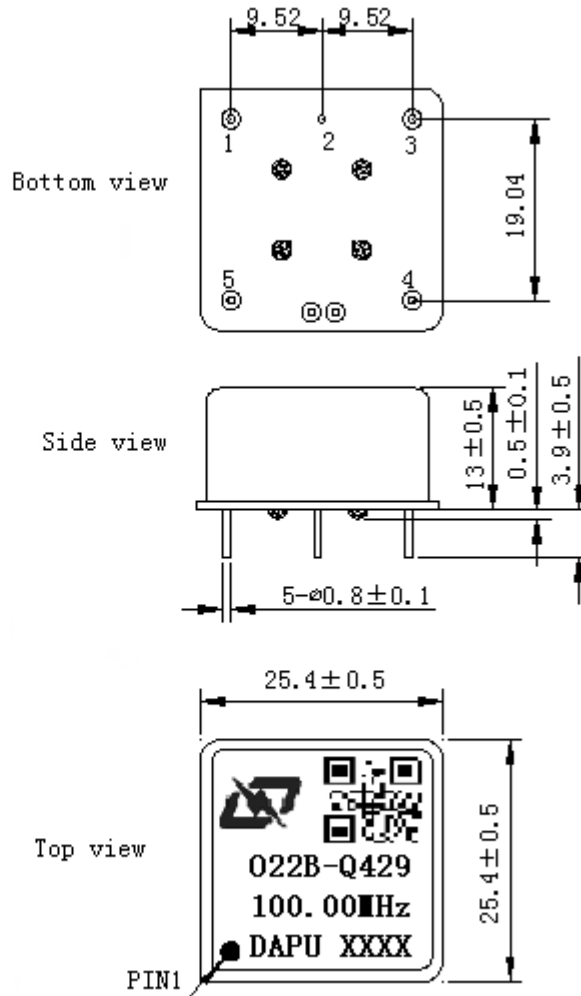
MODEL: O22B-Q429-100.00MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Power Supply	Supply Voltage	4.75	5.0	5.25	V	
	Steady Consumption			300	mA	
	Warm up current			600	mA	
Input	Input Frequency	10.00			MHz	Pin 4
	Input Waveform	Sine wave				
	Level	1		8	dBm	
	Load	50			Ω	
	Harmonics Suppression			-30	dBc	
	Spurious Suppression			-70	dBc	
Output	Output Frequency	100.00			MHz	Pin 1
	Output Waveform	Sine wave				
	Level	5			dBm	
	Load	50			Ω	
	Harmonics Suppression			-30	dBc	
	Spurious Suppression			-70	dBc	
	Frequency Tolerance vs. Operating Temperature Range	-0.05		+0.05	$\times 10^{-6}$	T_A varied from -40°C to 70°C , measurement referenced to frequency observed with $f_{\text{ref}}=(f_{\text{max}}+f_{\text{min}})/2$, $V_{\text{cc}}=5.0\text{V}$, $O_{\text{load}}=50\Omega$, temperature variable speed less than 2°C per minute.
	Frequency Tolerance vs. Supply Voltage	-0.05		+0.05	$\times 10^{-6}$	Measurement referenced to frequency observed $T_A=25^{\circ}\text{C}$, V_{cc} varied from 4.75V to 5.25V, $O_{\text{load}}=50\Omega$.
	Frequency Tolerance vs. Load	-0.05		+0.05	$\times 10^{-6}$	5% load change measurement referenced to frequency observed with $T_A=25^{\circ}\text{C}$, $V_{\text{cc}}=5.0\text{V}$, and $O_{\text{Load}}=50\Omega$.
	Aging Tolerance 1 Year	-0.1		+0.1	$\times 10^{-6}$	V_{cc}, T_A constant measurement referenced to frequency observed with $T_A=25^{\circ}\text{C}$, $V_{\text{cc}}=5.0\text{V}$, and after 30 days of operation.



Phase Noise	Phase Noise		-110	-105	dBc/Hz	10Hz
			-140	-135		100Hz
			-160	-155		1KHz
			-172	-167		10KHz
			-180	-175		100KHz
		Note: typical values in locked state and unlocked state. The test reference source is 10.00mhz OCXO				
Environmental Conditions	Operable Temperature	-40		+70	°C	
	Storage Temperature	-45		+85	°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	Not humidity sensitive.				
	Vibration	Test conditions: acceleration: 6g; 20Hz ~ 2000Hz, ASD: 0.04g ² /Hz, one cycle every 30 minutes, test for 2 hours (3 times, 3 directions x, y, Z,); GJB 150.16A-2009				
Shock	100g, 6ms; Half sine wave (3 directions x, y, z), GJB 360G-2009					
Full Package Storage	Relative humidity (%)	20% ~ 70%				
	Temperature (°C)	-10~35°C				



2. Mechanical Structure(mm)



PIN FUNCTION

PIN	FUNCTION
1	RF Output
2	GND
3	Lock Indication
4	Input
5	Supply Voltage

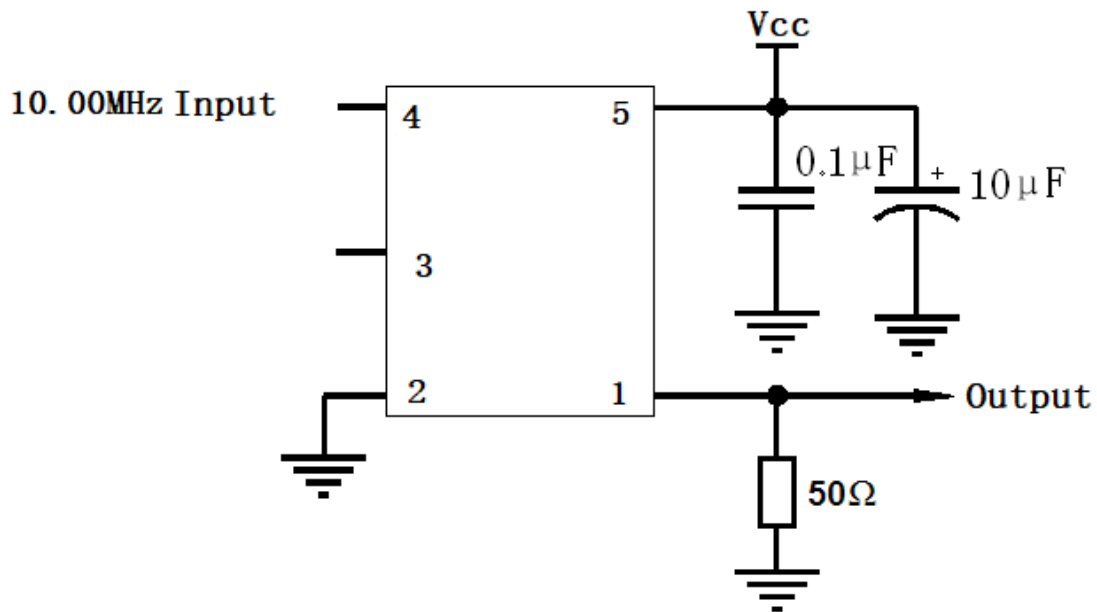
Note1: Tolerance ± 0.20mm without mark

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

Note3: Pin 3 description: When 100MHz is output and 10MHz is locked, the output high level is > 2.7V;
Unlocked output low level < 0.4V



3. Test Circuit



4. Package(mm)

