

Travelling Merchant: _____

DATASHEET

Standard: **O22B-G426-100.00MHz**

P/N: _____

Plot			The Label
Drew	Audited	Approved	Stamp, please! Thanks!
Date: 2018.08.13			

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Table of amendment

Version	Revision contents	Prepared by	Revised date
1.0	The first issued	<i>Amway</i>	2013.01.24
1.1	“Frequency Tolerance vs. Operating Temperature Range” change	<i>Amway</i>	2013.12.28
1.2	“Current Consumption” and “Current Consumption during warm up” change	<i>Amway</i>	2014.01.04
1.3	“Initial Frequency Tolerance” ,“Frequency Tuning Range” “and Mechanical Structure” changed	<i>Amway</i>	2016.06.16
1.4	The “Mechanical Structure” changed	<i>Amway</i>	2018.07.20
1.5	The “Frequency Tolerance vs. supply voltage” and “Frequency Tolerance vs. Load”changed	<i>Amway</i>	2018.08.13



1. Electrical Parameters

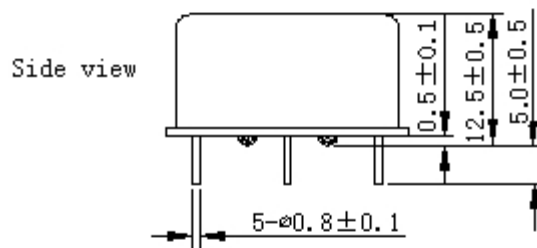
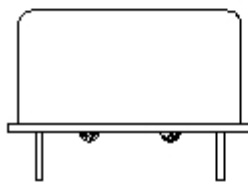
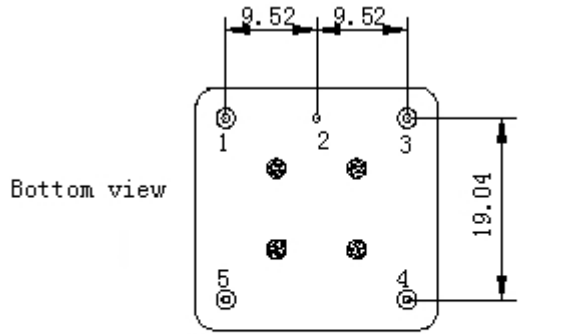
MODEL: O22B-G426-100.00MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency	100.00			MHz	
	Output Waveform	Sine wave				
	Level	6		10	dBm	
	Load	50			Ω	
	Harmonics Suppression			-30	dBc	
	Spurious Suppression			-60	dBc	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.01		+0.01	$\times 10^{-6}$	T_A varied from -10°C to 60°C , measurement referenced to frequency observed with $f_{\text{ref}}=(f_{\text{max}}+f_{\text{min}})/2$, $V_{\text{cc}}=5.0\text{V}$, $V_c=2.5\text{V}$, $O_{\text{load}}=50\Omega$, temperature variable speed less than 2°C per minute.
		-0.05		+0.05	$\times 10^{-6}$	T_A varied from -40°C to 70°C , measurement referenced to frequency observed with $f_{\text{ref}}=(f_{\text{max}}+f_{\text{min}})/2$, $V_{\text{cc}}=5.0\text{V}$, $V_c=2.5\text{V}$, $O_{\text{load}}=50\Omega$, temperature variable speed less than 2°C per minute.
	Initial Frequency Tolerance	-0.2		+0.2	$\times 10^{-6}$	Measurement referenced to frequency observed with $T_A=25^\circ\text{C}$, $V_{\text{cc}}=5.0\text{V}$, $V_c=2.5\text{V}$ and after 15 minutes of operation, within 30 days after ex-works.
	Frequency Tolerance vs. supply voltage	-0.03		+0.03	$\times 10^{-6}$	measurement referenced to frequency observed $T_A=25^\circ\text{C}$, V_{cc} varied from 4.75V to 5.25V, $V_c=2.5\text{V}$, $O_{\text{load}}=50\Omega$.
	Frequency Tolerance vs. Load	-0.01		+0.01	$\times 10^{-6}$	5% Load Change Measurement referenced to frequency observed with $T_A=25^\circ\text{C}$, $V_{\text{cc}}=5.0\text{V}$, $V_c=2.5\text{V}$, $O_{\text{load}}=50\Omega$.
	Short Term Stability			0.01	$\times 10^{-9}$	Temperature stability, no EMI\EMC or other interference, test after power for 1hour ref. to 25°C ; 1s, using PN9000 equipment.
	Aging Tolerance per day	-1		+1	$\times 10^{-9}$	V_{cc}, V_c, T_A constant Measurement referenced to frequency observed with $T_A=25^\circ\text{C}$, $V_{\text{cc}}=5.0\text{V}$,
	Aging Tolerance 1Year	-0.1		+0.1	$\times 10^{-6}$	$V_c=2.5\text{V}$, $O_{\text{load}}=50\Omega$ and after 30 days of operation.
Power Supply	Supply Voltage	4.75	5.0	5.25	V	
	Current Consumption			500	mA	@ 25°C
	Current Consumption during warm up			1000	mA	



Voltage Control Characteristics	Frequency Tuning Range		-1.0	$\times 10^{-6}$	$V_c=0V$. measurement referenced to $V_c=2.5V$.	
		-0.2	+0.2	$\times 10^{-6}$	$V_c=2.5V$. measurement referenced to exactly 100.00MHz.	
		+1.0		$\times 10^{-6}$	$V_c=5.0V$. measurement referenced to $V_c=2.5V$.	
	Linearity		10	%		
	Slope	Positive				
	Input Impedance	100			K Ω	
Phase Noise	Phase Noise		-90	-85	dBc/Hz	10Hz
			-130	-125		100Hz
			-145	-140		1KHz
			-150	-145		10KHz
			-155	-150		100KHz
			-158	-153		1MHz
Environmental Conditions	Operable Temperature	-40		+85	$^{\circ}C$	
	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; ANSI/ESDA/JEDEC JS-001-2010.				
	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.					

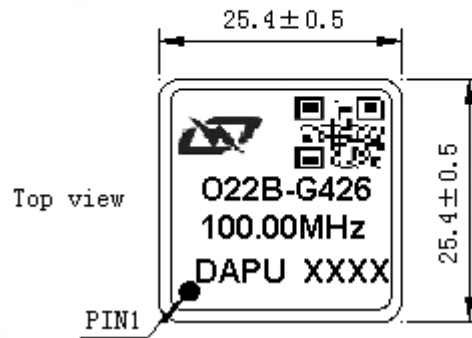


2. Mechanical Structure (mm)



PIN FUNCTION

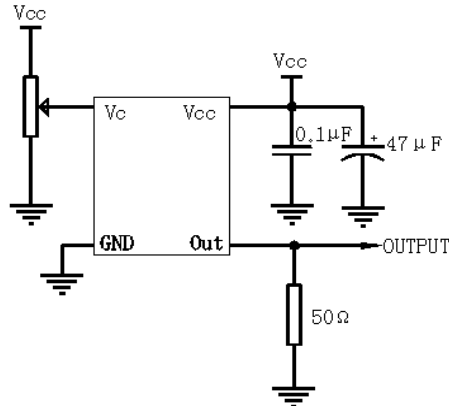
PIN	NOTATION	FUNCTION
1	OUTPUT	RF Output
2	GND	GND
3	VC	Control Voltage
4	NC	Not Connect
5	VCC	Supply Voltage



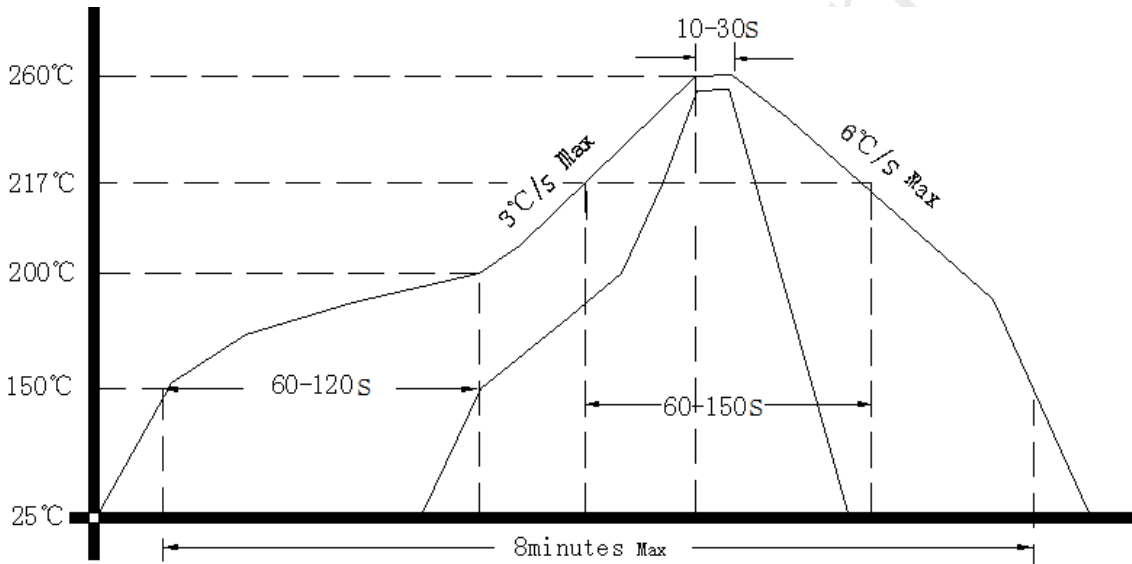
- Note1:** Tolerance $\pm 0.2\text{mm}$ without mark
- Note2:** The first two xx representative: week
After two xx representative: year
- Note3:** Referential weight 13.6g
- Note4:** NC is not connect



3. Test Circuit



4. Reflow Soldering Curve (RoHS)



5. Package(mm)

