

Travelling Merchant: _____

DATASHEET

Standard: **O22B-K329-25.00MHz-G227**

P/N: _____

Plot			The Label
Drew	Audited	Approved	Stamp, please! Thanks!
Date: 2024.04.10			

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Table of amendment

Version	Revision contents	Prepared by	Revised date
1.0	The first issued	<i>Amway</i>	2024.04.10



1. Electrical Parameters

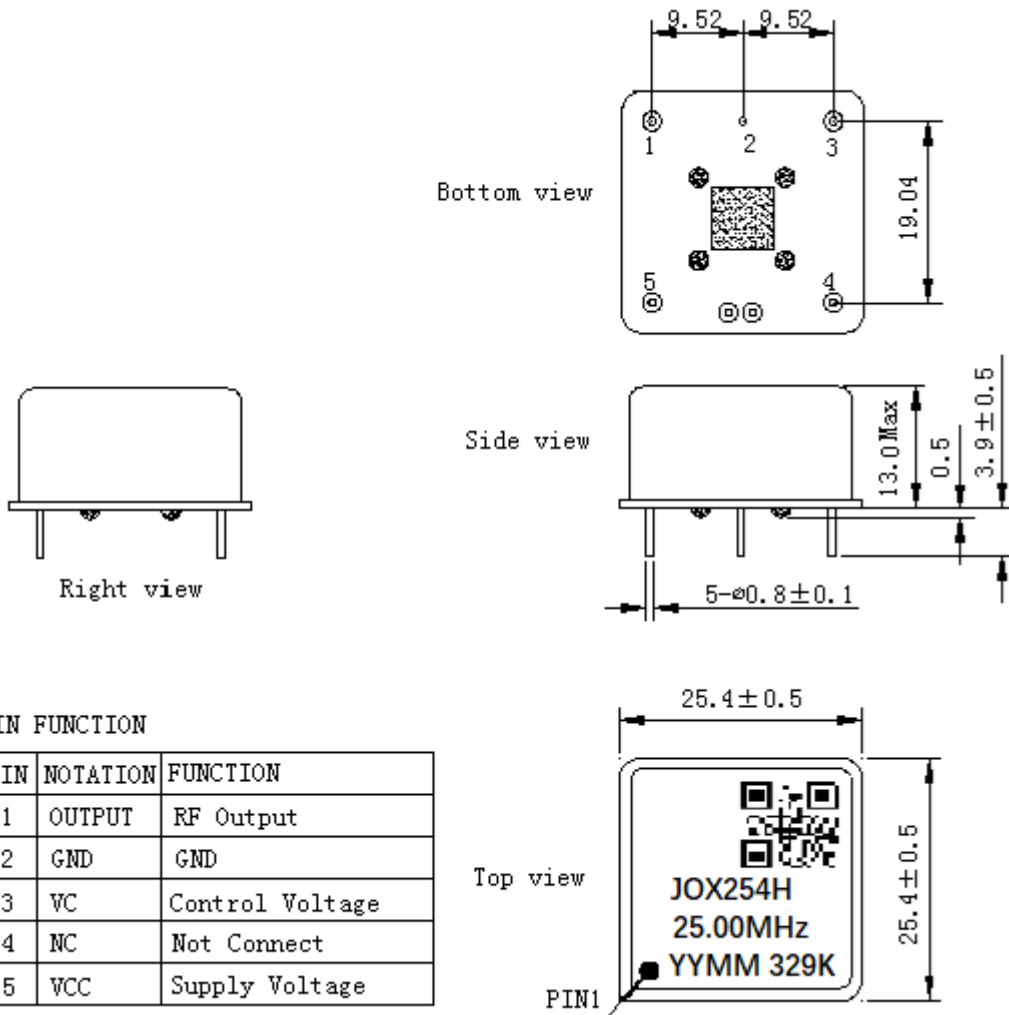
MODEL: O22B-K329-25.00MHz-G227						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency	25.00			MHz	
	Output Waveform	HCMOS				
	Output Low Voltage			0.4	V	$V_{cc}=5.0V, O_{load}=15pF$
	Output High Voltage	3.6			V	$V_{cc}=5.0V, O_{load}=15pF$
	Duty Cycle	45		55	%	@50%
	Rise / Fall Time (10%~90%)			5	ns	
	Load	15			pF	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.01		+0.01	$\times 10^{-6}$	T_A varied from $-40^{\circ}C$ to $85^{\circ}C$, measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2, V_{cc}=5.0V, O_{load}=15pF$, temperature variable speed less than $2^{\circ}C$ per minute.
	Initial Frequency Tolerance	-0.2		+0.2	$\times 10^{-6}$	Measurement referenced to frequency observed with $T_A=25^{\circ}C, V_{cc}=5.0V$, and after 15 minutes of operation, within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-3		+3	$\times 10^{-9}$	measurement referenced to frequency observed $T_A=25^{\circ}C, V_{cc}$ varied from 4.75V to 5.25V and $O_{Load}=15pF$.
	Frequency Tolerance vs. Load	-3		+3	$\times 10^{-9}$	5% load change measurement referenced to frequency observed with $T_A=25^{\circ}C, V_{cc}=5.0V$, and $O_{Load}=15pF$.
	Short-Term Stability: Allan Variance		0.02		$\times 10^{-9}$	Temperature stability, no EMI\EMC or other interference, test after power for 1hour ref. to $25^{\circ}C; 1s$.
	Aging Tolerance Per Day	-2		+2	$\times 10^{-9}$	V_{cc}, T_A constant measurement referenced to frequency observed with $T_A=25^{\circ}C, V_{cc}= 5.0V$ and after 30 days of operation.
	Aging Tolerance 1 Year	-0.2		+0.2	$\times 10^{-6}$	



Power Supply	Supply Voltage	4.75	5.0	5.25	V	
	Steady Consumption			200	mA	@25°C
	Warm up current			550	mA	
	Warm-up time			5	min	@25°C, within 0.03×10^{-6} of final frequency with reference after 1 hour on.
Phase Noise	Phase Noise		-115	-105	dBc/Hz	10Hz
			-145	-135		100Hz
			-157	-152		1KHz
			-163	-158		10KHz
			-163	-158		100KHz
Environmental Conditions	Operable Temperature	-40		+85	°C	
	Storage Temperature	-55		+105	°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 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 (°C)	-10~35°C				



2. Mechanical Structure (mm)



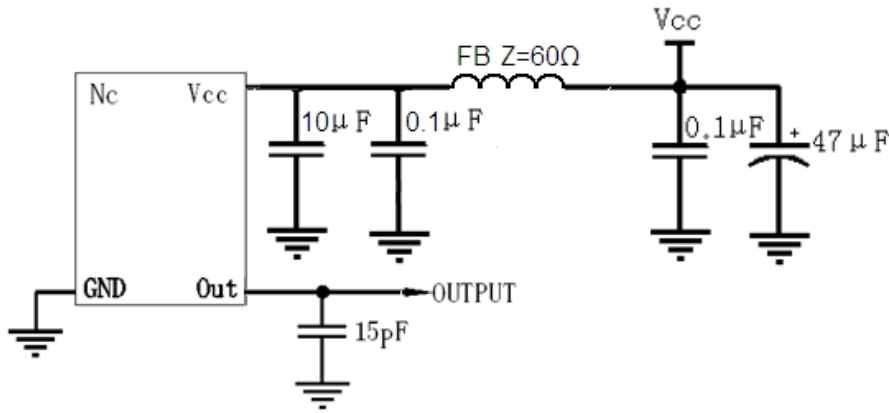
PIN FUNCTION

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

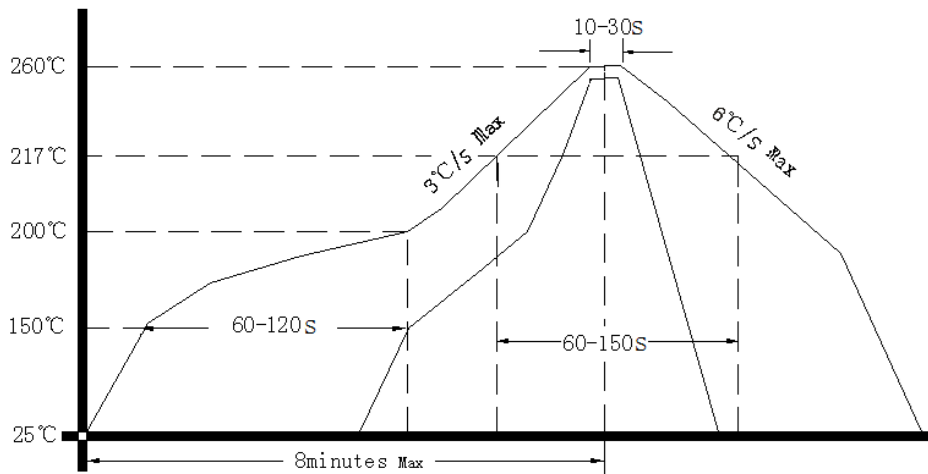
- Note1:** Tolerance ± 0.2mm without mark
- Note2:** The first two YY representative: year
After two MM representative: month
- Note3:** Referential weight 13.6g
- Note4:** NC is not connect



3. Test Circuit



4. Reflow Soldering Curve (RoHS)



5. Package (mm)

