Customer Code: _____

DATASHEET

DAPU P/N: **O79A-3701-30.72MHz**

Customer P/N: _____

DAPU			Customer Approval
Drew	Audited	Approved	Stamp, please! Thanks!
Amway.wei	Tony · Wang	James.Liu	
Date: 2019.11.07			

Guangdong Dapu Telecom Technology Co.,Ltd

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Table of amendment

Version	Revision contents	Prepared by	Revised date
1.0	The first issued	Amway	2019.11.07

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1. Electrical Parameters

MODEL： O79A-3701-30.72MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		30.72		MHz	
	Output Waveform		LVCMOS			
	Output Low Voltage			0.4	V	V_{cc}=3.3V, O_{load}=15pF
	Output High Voltage	2.4			V	V_{cc}=3.3V, O_{load}=15pF
	Duty Cycle	45	50	55	%	@50%
	Rise / Fall Time (10%~90%)			5	ns	
	Sub harmonics			-40	dBc	
	Non harmonic spurious			-60	dBc	
	Load		15		pF	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.02		+0.02	$\times 10^{-6}$	T_A varied from -40℃ to 95℃, measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2$, V_{cc}=3.3V, V_c=1.25V, O_{load}=15pF, 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}=3.3V, V_c=1.25V, and after 15 minutes of operation, within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-5		+5	$\times 10^{-9}$	measurement referenced to frequency observed T_A=25℃, V_{cc} varied from 3.13V to 3.47V, V_c=1.25V, and O_{Load}=15pF.
	Frequency Tolerance vs. Load	-5		+5	$\times 10^{-9}$	10% load change measurement referenced to frequency observed with T_A=25℃, V_{cc}=3.3V, V_c=1.25V,and O_{Load}=15pF.
	Reflow shift	-0.2		+0.2	$\times 10^{-6}$	Pre to post reflow △F(measured≥60 minutes after reflow)
	Frequency Slope	-0.5		+0.5	$\times 10^{-9}$/℃	
	Short-Term Stability: Allan Variance			0.1	$\times 10^{-9}$	Temperature stability, no EMI\EMC or other interference，test after power for 1hour ref. to 25℃; 1s.
	Aging Tolerance Per Day	-3		+3	$\times 10^{-9}$	V_{cc}, V_c, T_A constant measurement referenced to frequency observed with T_A=25℃, V_{cc}=3.3V, V_c=1.25V, and after 30 days of operation.
	Aging Tolerance 1 Year	-0.3		+0.3	$\times 10^{-6}$	
	Aging Tolerance 10 Year	-2.4		+2.4	$\times 10^{-6}$	

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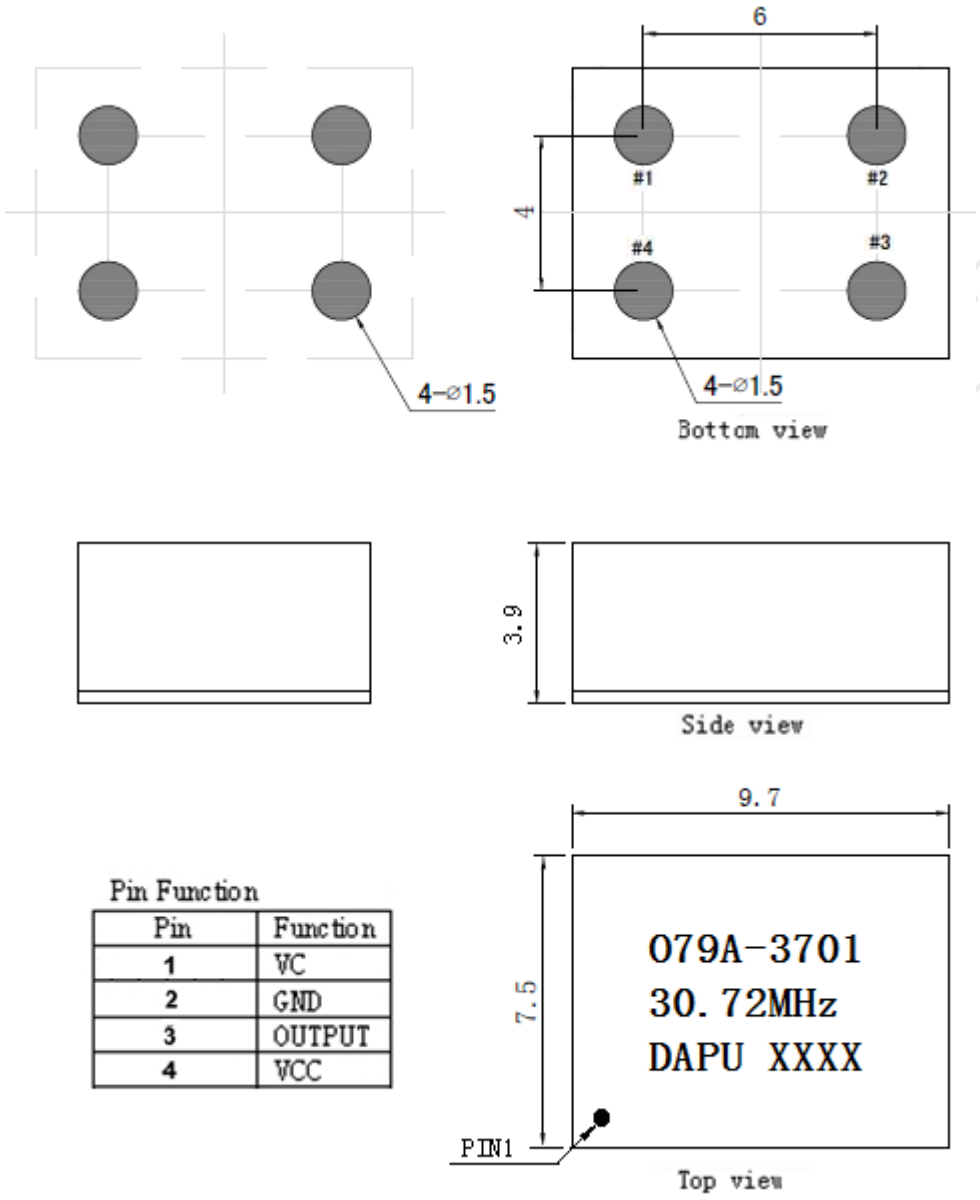
Power Supply	Supply Voltage	3.13	3.3	3.47	V	
	Steady Consumption			250	mA	@25℃
	Warm up current			500	mA	
Voltage Control Characteristics	Frequency Tuning Range	-3.3		-1.9	$\times 10^{-6}$	V_c=0.25V. measurement referenced to V_c=1.25V
		-0.1		+0.1	$\times 10^{-6}$	V_c=1.25V. measurement referenced to exactly 30.72MHz
		+1.9		+3.3	$\times 10^{-6}$	V_c=2.25V. measurement referenced to V_c=1.25V
	Linearity			1	%	
	Slope	Positive				
	Input Impedance	100			KΩ	
Phase Noise	Phase Noise		-73		dBc/Hz	1Hz
			-105			10Hz
			-133			100Hz
			-153			1KHz
			-158			10KHz
			-160			100KHz
			-161			1MHz
Environmental Conditions	Operable Temperature	-40		+95	℃	
	Storage Temperature	-55		+105	℃	
	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	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 (℃)	-10~35℃				

2. Mechanical Structure (mm)



Pin Function

Pin	Function
1	VC
2	GND
3	OUTPUT
4	VCC

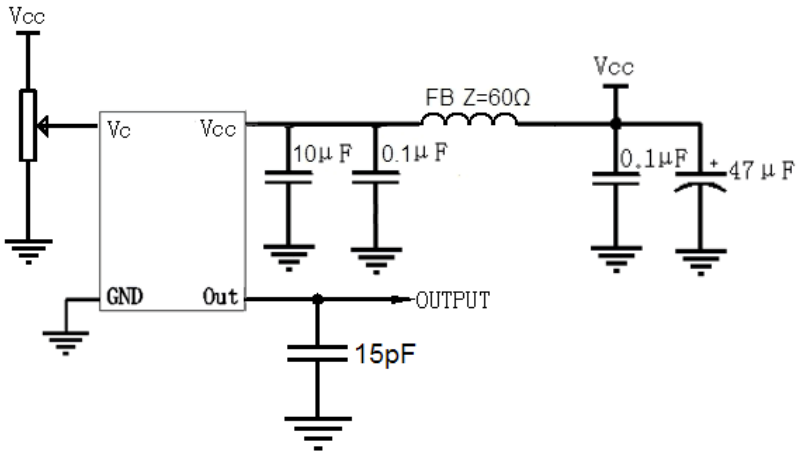
Note1: Tolerance ±0.2mm without mark

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

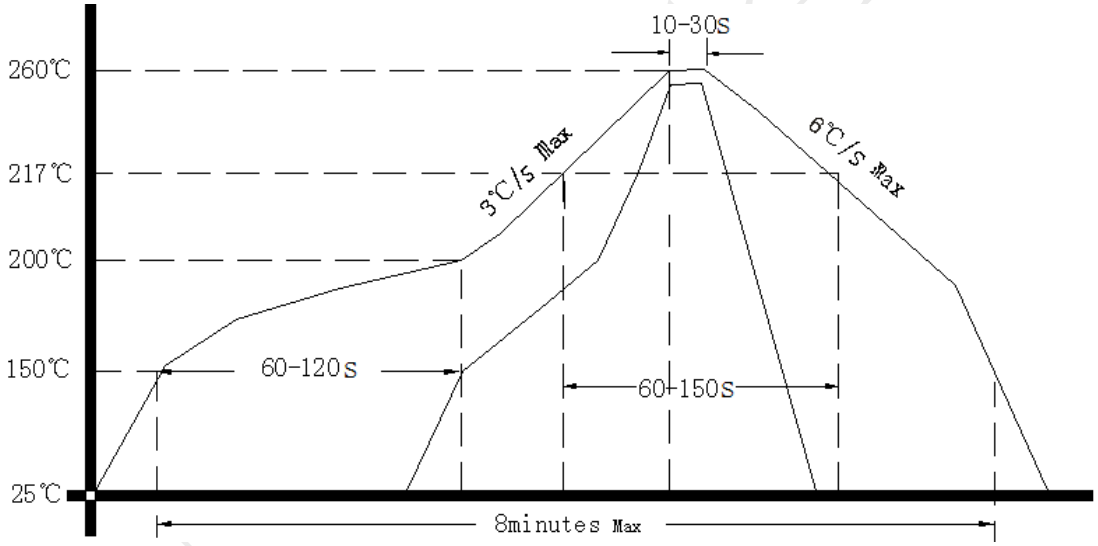
Note3: Referential weight 1.5g

Note4: NC is not connect

3. Test Circuit



4. Reflow Soldering Curve (RoHS)



Note: passing through reflow upside down is not supported

5. Package: Tape & Reel (mm)