Travelling Merchant:_____

DATASHEET

Standard: **O79A-K319-19.20MHz**

P/N: _____

Plot			The Label
Drew	Audited	Approved	
Date: 2020.11.02			Stamp, please! Thanks!

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	2018.01.10
1.1	The “Rise / Fall Time” “Initial Frequency Tolerance” “Frequency slope” “Aging Tolerance Per Day” “Aging Tolerance 1 Year” “Warm up current” “Warm up Time” “Phase Noise” “ESD Level” “Mechanical Structure” “Package: Tape & Reel’changed	Amway	2020.11.02

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1. Electrical Parameters

MODEL: O79A-K319-19.20MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		19.20		MHz	
	Output Waveform		HCMOS			
	Output Low Voltage			0.4	V	V_{cc}=3.3V, O_{load}=15 pF
	Output High Voltage	2.4			V	V_{cc}=3.3V, O_{load}=15 pF
	Duty Cycle	45	50	55	%	@50%
	Rise / Fall Time （10%~90%）			6	ns	10%~90%
	Load		15		pF	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.01		+0.01	$\times 10^{-6}$	T_A varied from -40℃to 95℃, measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2$, V_{cc}=3.3V, O_{load}=15pF, temperature variable speed less than 2℃ per minute.
	Initial Frequency Tolerance	-1		+1	$\times 10^{-6}$	Measurement referenced to frequency observed with T_A=25℃, V_{cc}=3.3V 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, and O_{Load}=15pF .
	Frequency Tolerance vs. Load	-5		+5	$\times 10^{-9}$	10% load change measurement referenced to frequency observed withT_A=25℃, V_{cc}=3.3V, O_{Load}=15pF.
	Reflow shift	-0.2		+0.2	$\times 10^{-6}$	Pre to post reflow △F(measured≥60min after reflow)
	Frequency slope	-0.5		+0.5	$\times 10^{-9}$/℃	T_{amb} slope ±1 ℃/min with any temperature window over operating temperature range. Includes also hysteresis effects. Slope measurement for device qualification as described in the related note.
	Aging Tolerance Per Day	-2		+2	$\times 10^{-9}$	T_A=25℃, V_{cc}=3.3V, and after 30 days of operation.
	Aging Tolerance 1 Year	-0.5		+0.5	$\times 10^{-6}$	

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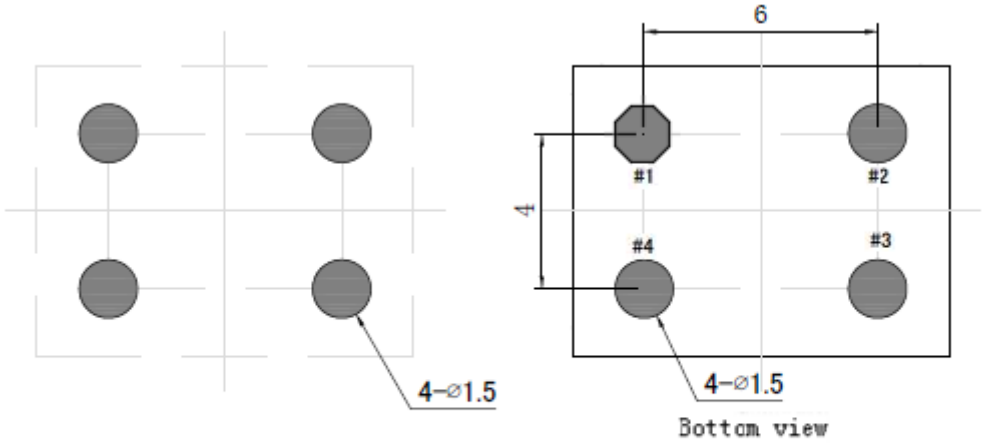
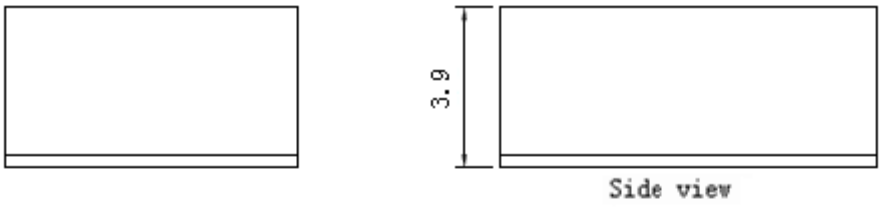
Power Supply	Steady Consumption			230	mA	@25℃
	Warm up current			600	mA	
	Warm up Time			60	s	Time until RF output is within ±0.025 ppm referenced to last frequency reading 1 h after startup, T_A varied from -40℃ to 95℃.
	Supply Voltage	3.13	3.3	3.47	V	
Phase Noise	Phase Noise @25℃		-80	-70	dBc/Hz	1Hz
			-115	-110		10Hz
			-146	-138		100Hz
			-160	-154		1KHz
			-164	-159		10KHz
			-164	-160		100KHz
			-165	-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; JEDEC JESD22-A115C.				
	Moisture Sensitivity Level	Level 3.				
	Vibration	Test Condition: 0.75mm ;acceleration:10g;10Hz～2000Hz, one cycle per 30 min, test 2 hour. (3 times for each 3 directions X ,Y , Z) .IEC 68-2-06 Test Fc.				
	Shock	100g； 6ms； half sine wave (3 times for each 3 directions X ,Y, Z),IEC 68-2-27 Test Ea/Severity 50A.				

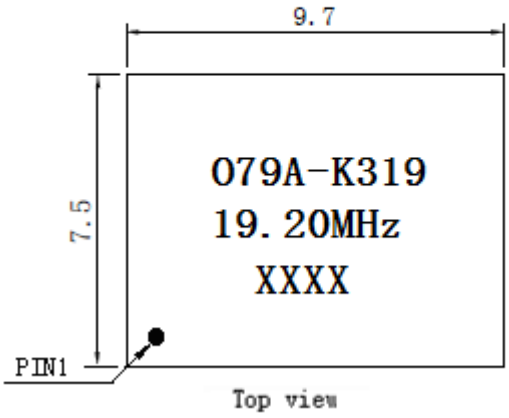
2. Mechanical Structure(mm)





Pin Function

Pin	Function
1	NC
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 0.2g

Note4: NC is not connect

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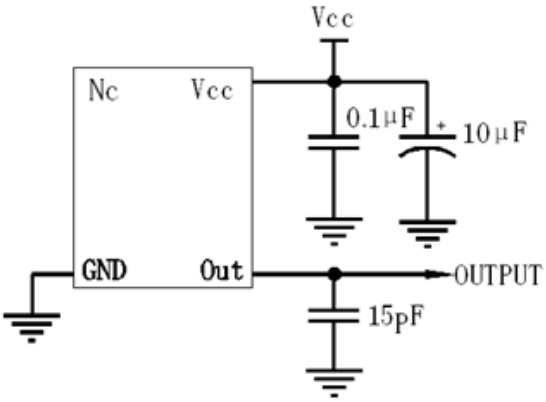
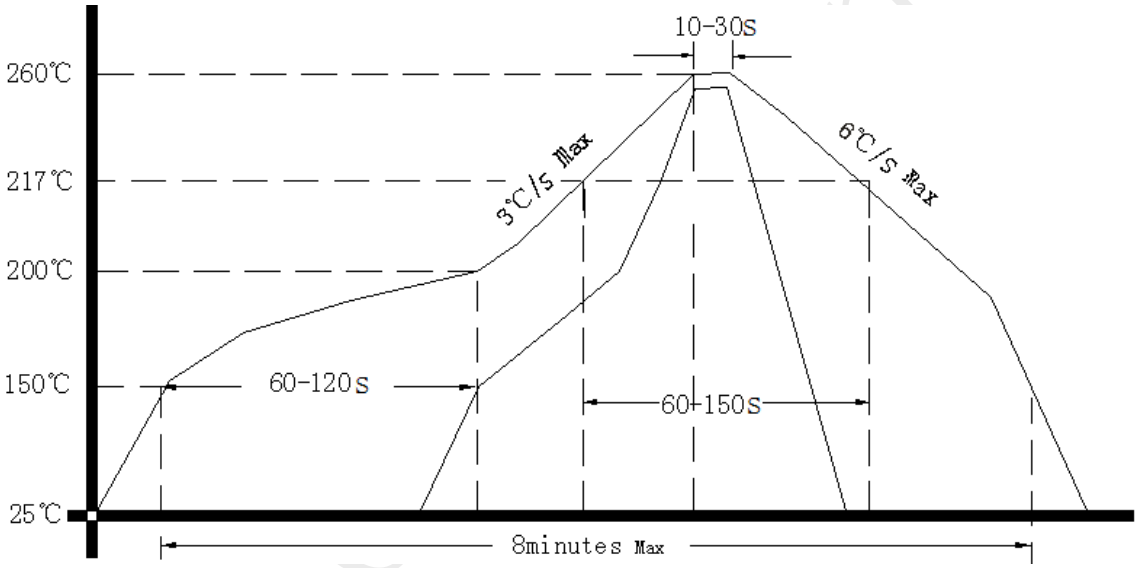
3. Test circuit



4. Reflow Soldering Curve (RoHS)



5. Package: Tape & Reel (mm)