Travelling Merchant:_____

DATASHEET

Standard: **O75A-N319-25.00MHz**

P/N: _____

Plot			The Label
Drew	Audited	Approved	
Amway.wei	Xu ming	Jason zhao	
Date: 2024.01.04			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	2024.01.04

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1. Electrical Parameters

MODEL： O75A-N319-25.00MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		25.00		MHz	
	Output Waveform		LVCMOS			
	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		55	%	@50%
	Rise / Fall Time			5	ns	10%~90%
	Startup time till valid waveform			10	ms	Time until RF output waveform is within output level, duty cycle and rise/fall time spec
	Load		15		pF	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.1		+0.1	$\times 10^{-6}$	T_A varied from -55℃to 70℃, 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. No wind.
	Initial Frequency Tolerance	-1.5		+1.5	$\times 10^{-6}$	Measurement referenced to frequency observed with T_A=25℃, V_{cc}=3.3V within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-0.01		+0.01	$\times 10^{-6}$	measurement referenced to frequency observed T_A= 25℃, V_{cc} varied from 3.135V to 3.465V, and O_{Load}=15pF .
	Frequency Tolerance vs. Load	-0.01		+0.01	$\times 10^{-6}$	10% load change measurement referenced to frequency observed with T_A=25℃,V_{cc}=3.3V, O_{Load}=15pF.
	Frequency vs. temperature slope	-3		+3	$\times 10^{-9}$/℃	Temperature ramp ≤1℃/minute
	Aging Tolerance Per Day	-3		+3	$\times 10^{-9}$	T_A=25℃, V_{cc}=3.3V, and after 30days of operation.
	Aging Tolerance Per year	-0.3		+0.3	$\times 10^{-6}$	

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	Steady Consumption			250	mA	@25℃
	Warm up current			650	mA	
	Supply Voltage	3.135	3.3	3.465	V	
Phase Noise	Phase Noise @25℃		-105	-100	dBc/Hz	10Hz
			-135	-130		100Hz
			-155	-150		1KHz
			-160	-155		10KHz
			-160	-155		100KHz
			-160	-155		1MHz
Environmental Conditions	Operating Temperature	-55		+70	℃	
	Storage Temperature	-55		+105	℃	
	Relative Humidity Range	5		95	%	
	Absolute Humidity Range	1		29	g/m^3	
	Air Pressure Range	70		106	kPa	
	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.				

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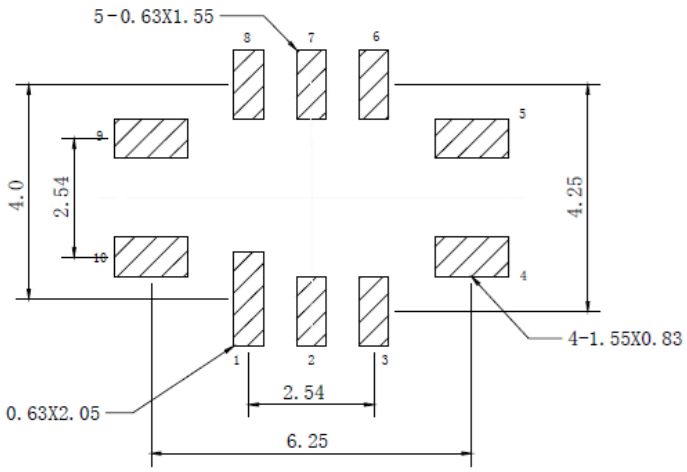
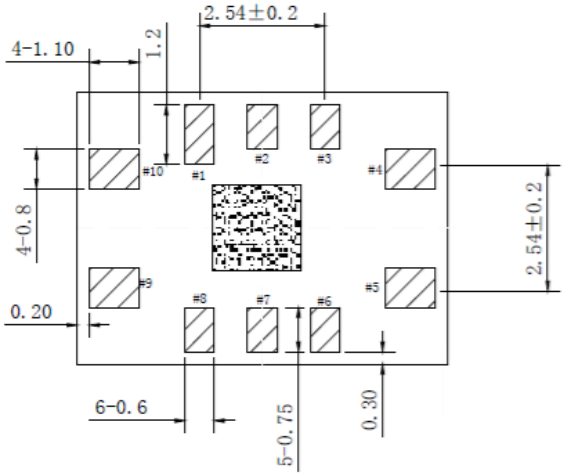
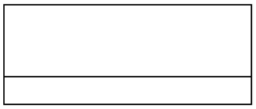
2. Mechanical Structure(mm)



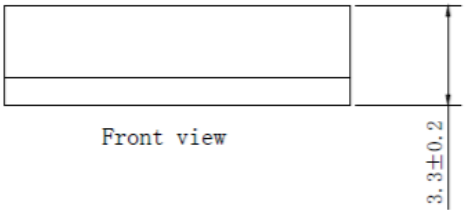
Solder pad layout



Bottom view



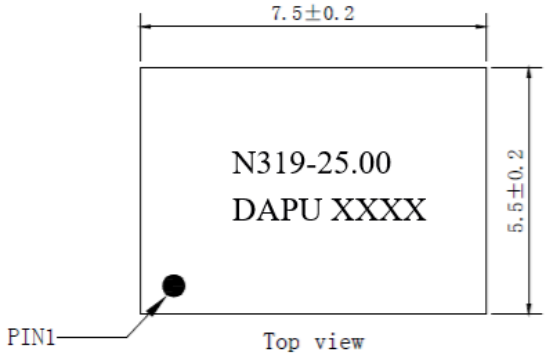
Right view



Front view

Pin Function

Pin	Function
1, 2, 3,6, 7, 8	NC
4	GND
5	OUTPUT
9	VCC
10	NC



Top view

Note1: Tolerance ±0.3mm without mark
Note2: The first two xx representative: week
After two xx representative: year
Note3: Referential Weight 0.3g
Note4: NC is not connect

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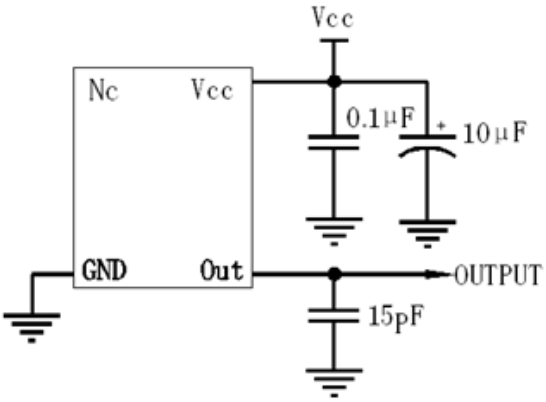
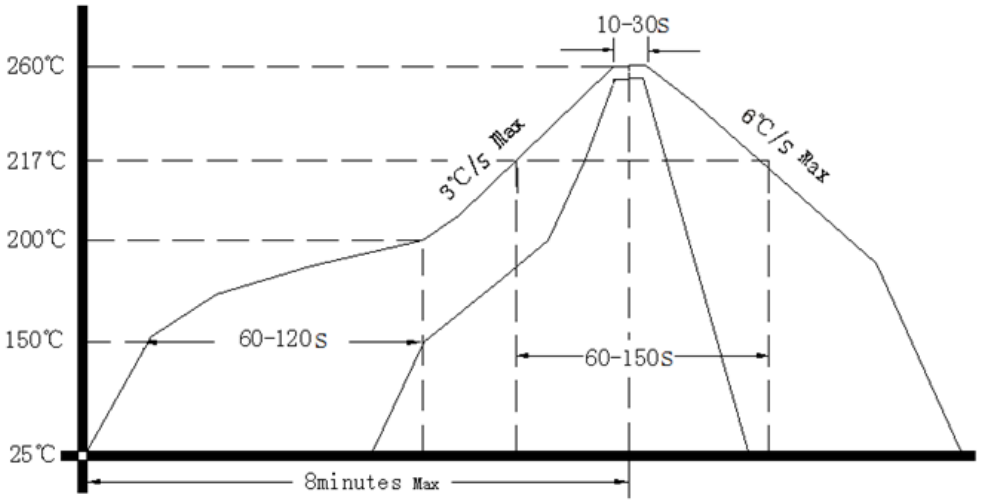
3. Test circuit



4. Reflow Soldering Curve (RoHS)



Note: Passing through reflow upside down is not supported

5. Package: Tape & Reel (mm)