Customer Code : _____

DATASHEET

DAPU P/N : **T936-A312-122.88MHz**

P/N : _____

DAPU			Customer Approval
Drew	Audited	Approved	
Amway.wei	Carry.Wang	Jason Zhao	
Date: 2024.06.12			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	2024.06.12

1. Electrical Parameters

MODEL： T936-A312-122.88MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		122.88		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%）			5	ns	@25℃
	Load		15		pF	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.15		+0.15	$\times 10^{-6}$	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=1.65V, 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, V_c=1.65V, and after 15 minutes of operation， within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-0.1		+0.1	$\times 10^{-6}$	measurement referenced to frequency observed T_A=25℃, V_{cc} varied from 3.13V to 3.47V, V_c=1.65V, and O_{Load}=15pF .
	Frequency Tolerance vs. Load	-0.1		+0.1	$\times 10^{-6}$	5% load change measurement referenced to frequency observed with T_A=25℃, V_{cc}=3.3V, V_c=1.65V, O_{Load}=15pF.
	Reflow Shift	-1		+1	$\times 10^{-6}$	Pre to post reflow ΔF (measured ≥ 60 minutes a fte r re flow)
	Acceleration Stability		2		$\times 10^{-9}$/g	Gamma vector 3-axes, 30 –1500Hz
	Aging Tolerance Per Day	-10		+10	$\times 10^{-9}$	TA=25℃, V_{cc}=3.3V, V_c=1.65V and after 1h of operation.
	Aging Tolerance 1 Year	-1		+1	$\times 10^{-6}$	
	Aging Tolerance 5 Years	-3		+3	$\times 10^{-6}$	
Power Supply	Current Consumption		25	30	mA	@25℃,V_{cc}=3.3V, O_{Load}=15pF.
	Supply Voltage	3.13	3.3	3.47	V	@25℃

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Voltage Control Characteristics	Frequency Tuning Range	-15		-10	$\times 10^{-6}$	V_c=0V. measurement referenced to V_c=1.65V
		-1		+1	$\times 10^{-6}$	V_c=1.65V. measurement referenced to exactly 122.88MHz
		+10		+15	$\times 10^{-6}$	V_c=3.3V. measurement referenced to V_c=1.65V
	Linearity			10	%	
	Slope	Positive				
	Input Impedance	100			KΩ	
Phase Noise	Phase Noise @25℃		-75		dBc/Hz	10Hz
			-100			100Hz
			-122			1KHz
			-141			10KHz
			-146			100KHz
			-147			1MHz
			-152			5MHz
			-162			20MHz
RMS Phase Jitter	RMS Phase Jitter		0.2		ps	12kHz to 20MHz
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 2.				
	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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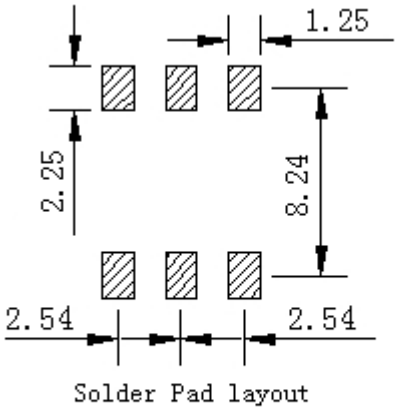
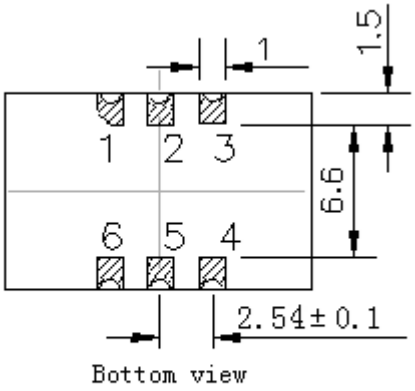
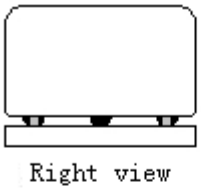
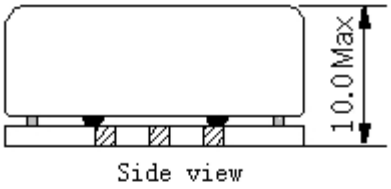
2. Mechanical Structure(mm)



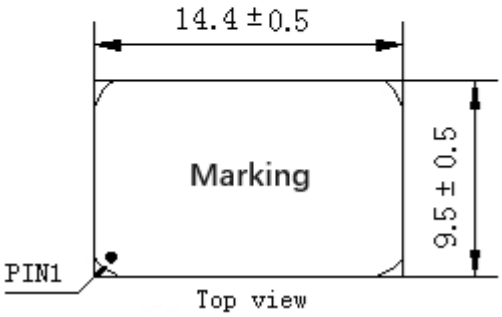




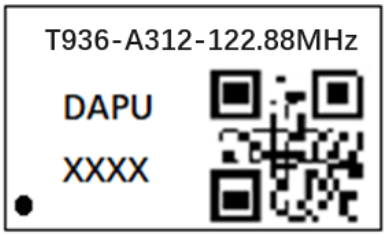


PIN FUNCTION

PIN	FUNCTION
1	VC
2,5	NC
3	GND
4	OUTPUT
6	VCC



Marking:



Note1: Tolerance ±0.2mm without mark

Note2: Referential weight 2.2g

Note3: NC is not connect

Note4: The first two xx representative: year , After two xx representative: week

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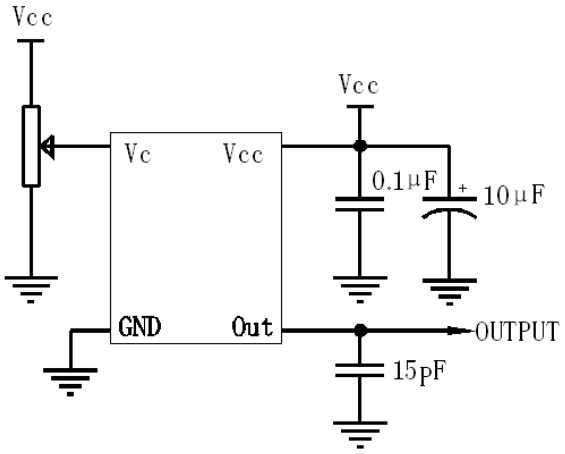
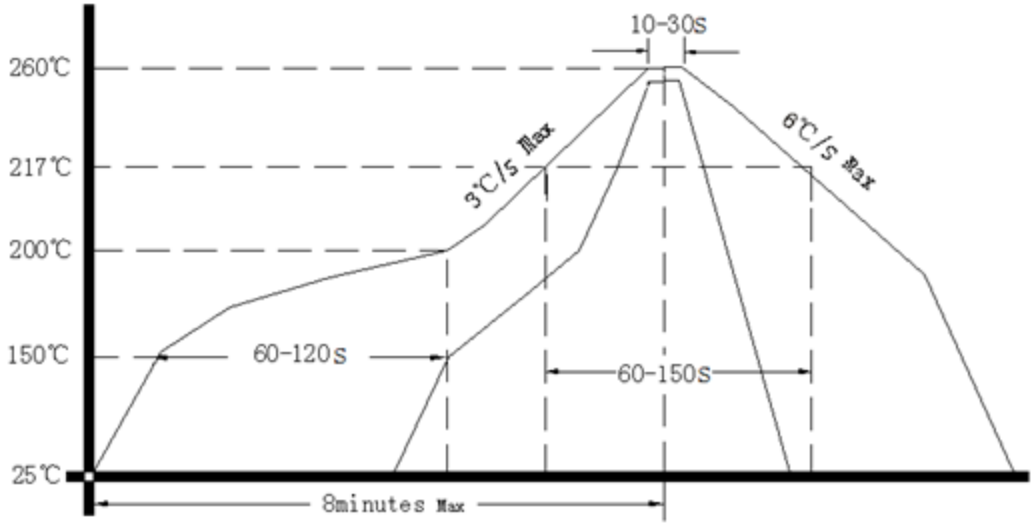
3. Test circuit



4. Reflow Soldering Curve (RoHS)



5. Package: Tape & Reel (mm)