Customer Code : _____

DATASHEET

DAPU P/N: **T53-Y519-50.00MHz-A**

Customer P/N: _____

DAPU			Customer Approval
Drew	Audited	Approved	
Amway.wei	Carry.Wang	Jason Zhao	
Date: 2023.01.31			Stamp, please! Thanks!

Guangdong Dapu Telecom Technology Co.,Ltd

Building 5, No.24, Industrial East Road, Songshanhu Park, Dongguan, Guangdong, P.R. China

TEL：0086-0769-88010888 FAX：0086-0769-81800098

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Table of amendment

Version	Revision contents	Prepared by	Revised date
1.0	The first issued	Amway	2022.11.07
1.1	The“Mechanical Structure”changed	Amway	2022.12.08
1.2	The “Phase Noise” changed	Amway	2023.01.31

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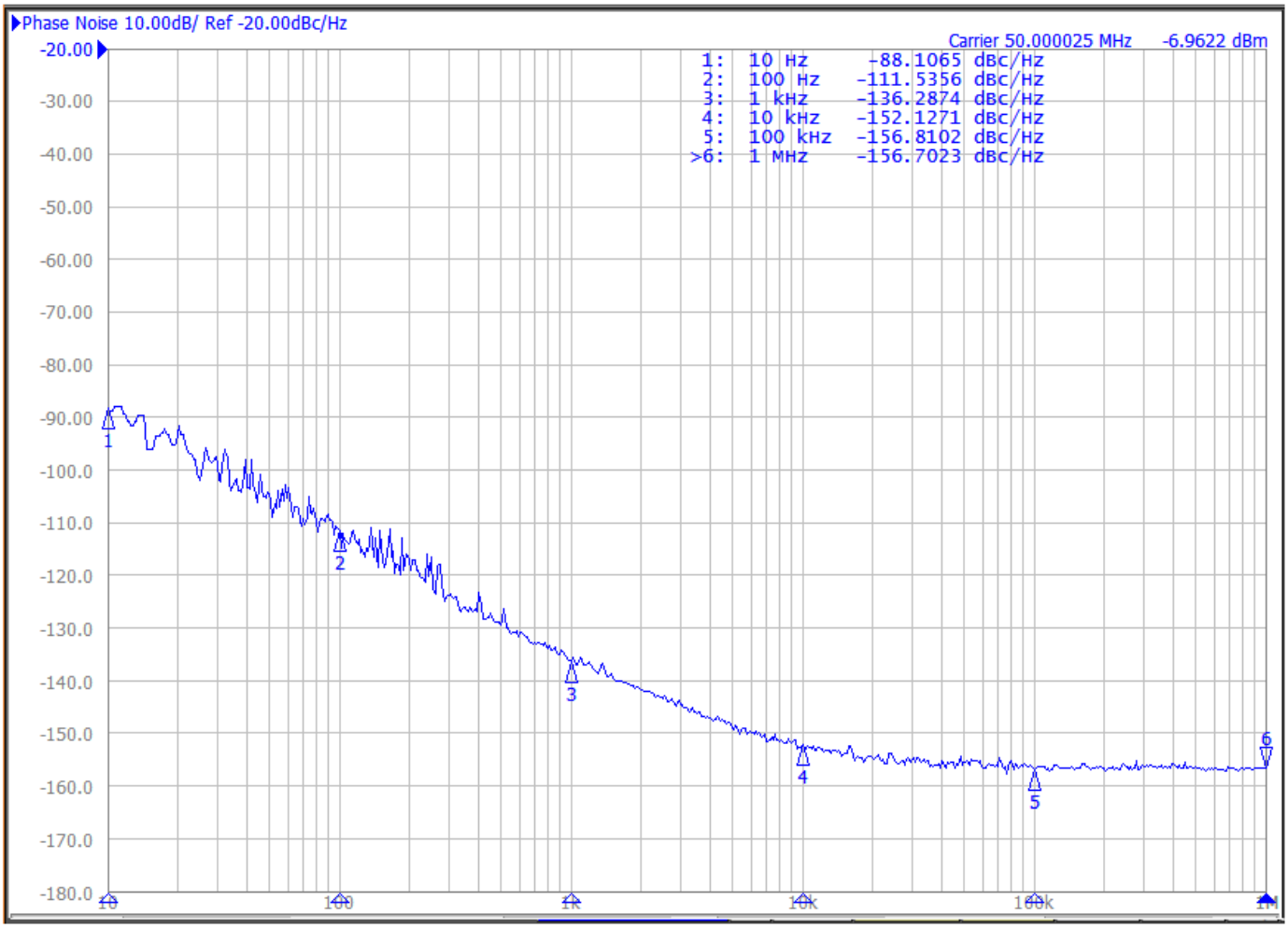
1. Electrical Parameters

MODEL: T53-Y519-50.00MHz-A						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		50.00		MHz	
	Output Waveform		Clipped Sine Wave			
	Vp-p	0.8			V	
	Load		10KΩ//10pF		pF	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.28		+0.28	$\times 10^{-6}$	T_A varied from -40℃ to 85℃, measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2$, V_{cc}=3.3V, O_{load}=10KΩ//10pF, temperature variable speed less than 2℃per minute.
	Nominal 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	-0.1		+0.1	$\times 10^{-6}$	measurement referenced to frequency observed T_A=25℃, V_{cc} varied from 3.13V to 3.47V and O_{load}=10KΩ//10pF .
	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 and OO_{load}=10KΩ//10pF .
	Short Term Stability			0.2	$\times 10^{-6}$	After power for 1 hour ref.to25℃
	Aging Tolerance 1 Year	-1		+1	$\times 10^{-6}$	T_A=25℃, V_{cc}=3.3V and after 1h of operation.
	Aging Tolerance 10 Years	-3		+3	$\times 10^{-6}$	
Power Supply	Operating Current			10	mA	@25℃, V_{cc}=3.3V, O_{load}=10KΩ//10pF .
	Supply Voltage	3.13	3.3	3.47	V	
Phase Noise	Phase Noise @25℃		-88		dBc/Hz	10Hz
			-110			100Hz
			-135			1KHz
			-152			10KHz
			-156			100KHz
			-156			1MHz

Environmental Conditions	Operable Temperature	-40		+85	℃	
	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.				
Full Package Storage	Relative humidity (%)	20%～70%				
	Temperature (℃)	-10~35℃				

2. Phase Noise



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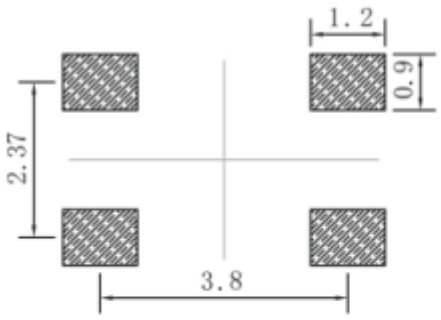
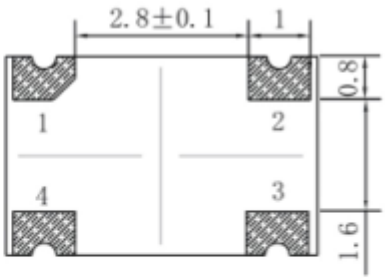
3. Mechanical Structure(mm)



Solder pad layout



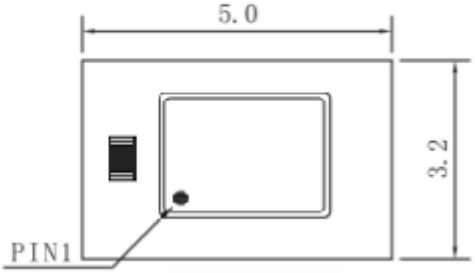
Bottom view

Right view

Side view

PIN FUNCTION

PIN	NOTATION	FUNCTION
1	NC	NC
2	GND	GND
3	OUTPUT	RF Output
4	VCC	Supply Voltage



Top view

Note1: Tolerance ±0.20mm without mark

Note2: Referential Weight 0.05g

Note3: NC is not connect

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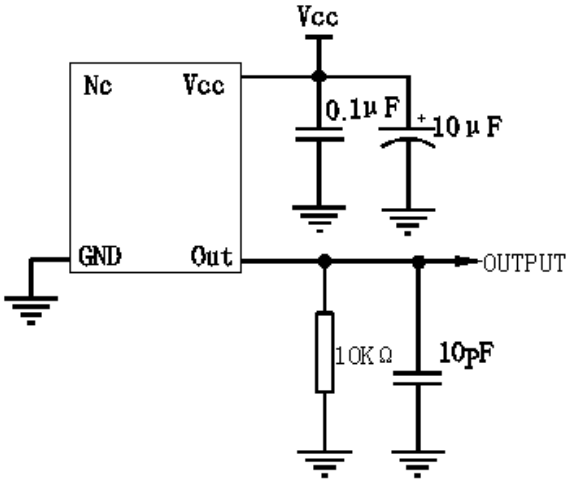
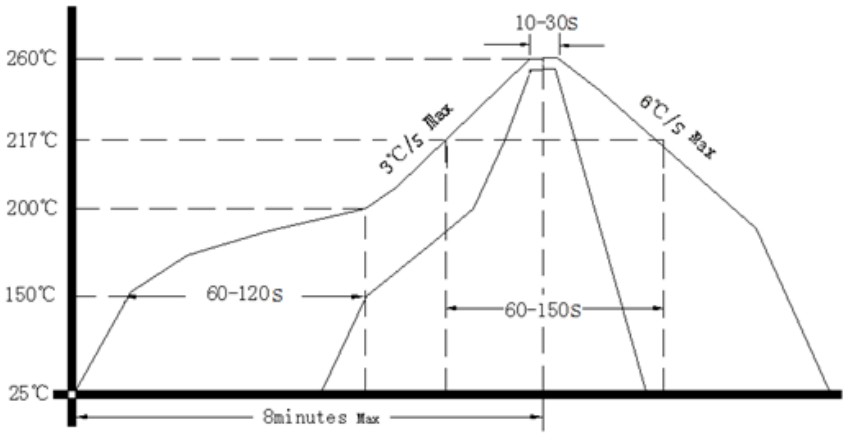
4. Test Circuit



5. Reflow Soldering Curve (RoHS)



6. Package: Tape & Reel (mm)