

Travelling Merchant: \_\_\_\_\_

# DATASHEET

Standard:           **V53-A312-30.72MHz**          

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

**Guangdong Dapu Telecom Technology Co.,Ltd**

Bldg13,.N.Ind.Zone,SSL Industry Park, Dongguan City, Guangdong Province, China

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



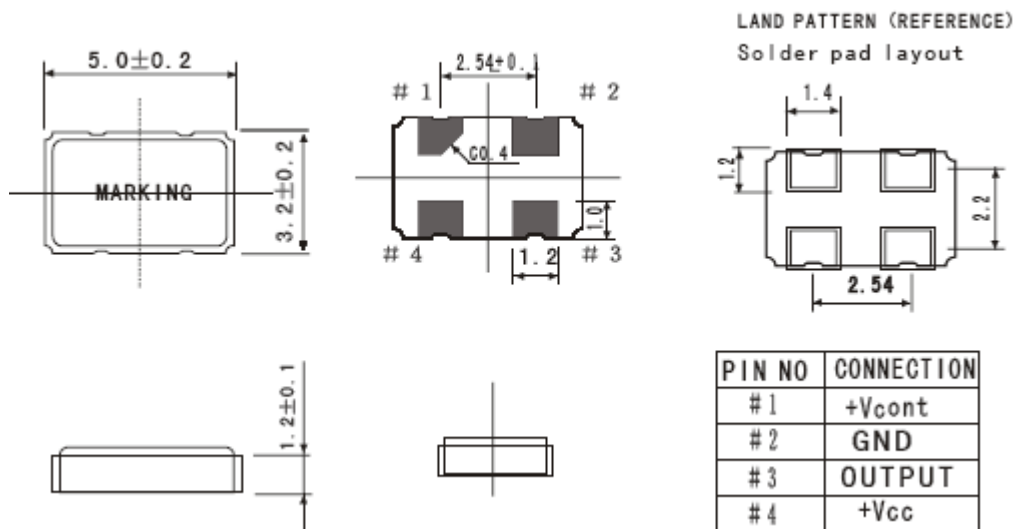
## 1. Electrical Parameters

MODEL: V53-A312-30.72MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency	30.72			MHz	
	Output Waveform	HCMOS				
	Output Low Voltage			0.4	V	$V_{cc}=3.3V, O_{load}=15pF$
	Output High Voltage	2.7			V	$V_{cc}=3.3V, O_{load}=15pF$
	Duty Cycle	45	50	55	%	
	Rise / Fall Time (10%~90%)			6	ns	@25°C
	Load	15			pF	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-25		+25	ppm	$T_A$ varied from -40°C to 85°C, measurement referenced to frequency observed with $T_A=25°C, V_{cc}=3.3V, V_c=1.65V, O_{load}=15pF$ , temperature rise speed less than 2°C per minute.
	Initial Frequency Tolerance	-30		+30	ppm	Measurement referenced to frequency observed with $T_A=25°C, V_{cc}=3.3V, V_c=1.65V$ , and after 15 minutes of operation, within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-5		+5	ppm	measurement referenced to frequency observed $T_A=25°C, V_{cc}$ varied from 3.14V to 3.46V, $V_c=1.65V$ and $O_{Load}=15pF$ .
	Frequency Tolerance vs. Load	-3		+3	ppm	5% load change measurement referenced to frequency observed with $T_A=25°C, V_{cc}=3.3V, V_c=1.65V$ and $O_{Load}=15pF$ .
	Aging Tolerance 1 Year	-5		+5	ppm	$V_{cc}, V_c, T_A$ constant measurement referenced to frequency observed with $T_A=25°C, V_{cc}=3.3V, V_c=1.65V$ , and after 30 days of operation.
Power Supply	Current Consumption			8	mA	@25°C, $V_{cc}=3.3V, V_c=1.65V, O_{load}=15pF$
	Supply Voltage	3.14	3.3	3.46	V	
Voltage Control Characteristics	Frequency Tuning Range			-80	ppm	$V_c=0V$ . measurement referenced to $V_c=1.65V$
		-30		+30	ppm	$V_c=1.65V$ . measurement referenced to exactly 30.72MHz
		+80			ppm	$V_c=3.3V$ . measurement referenced to $V_c=1.65V$



	Linearity			20	%	
	Slope	Positive				
	Input Impedance	100			K Ω	
Phase Noise	Phase Noise			-75	dBc/Hz	10Hz
				-105		100Hz
				-125		1KHz
				-140		10KHz
				-145		100KHz
Environmental Conditions	Operable Temperature	-40		+85	°C	
	Storage Temperature	-55		+125	°C	
	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).				
	Shock	100g; 6ms; half sine wave (3 times for each 3 directions X , Y , Z ),IEC 68-2-27 Test Ea/Severity 50A.				
	Drop	Test Condition: free drop on steel-made surface or rigid plane from a height of 100cm, IEC 68-2-32.				

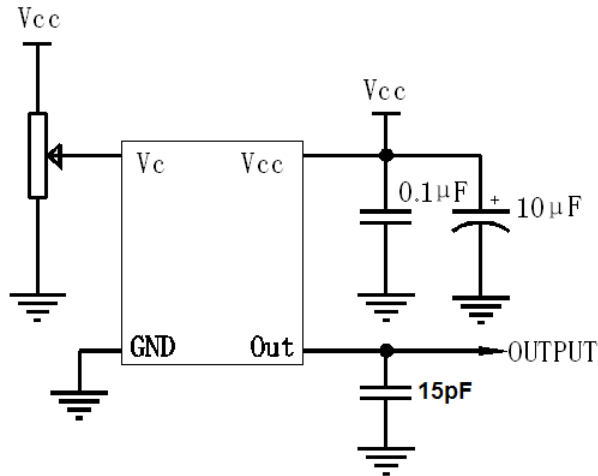
## 2. Mechanical Structure (mm)



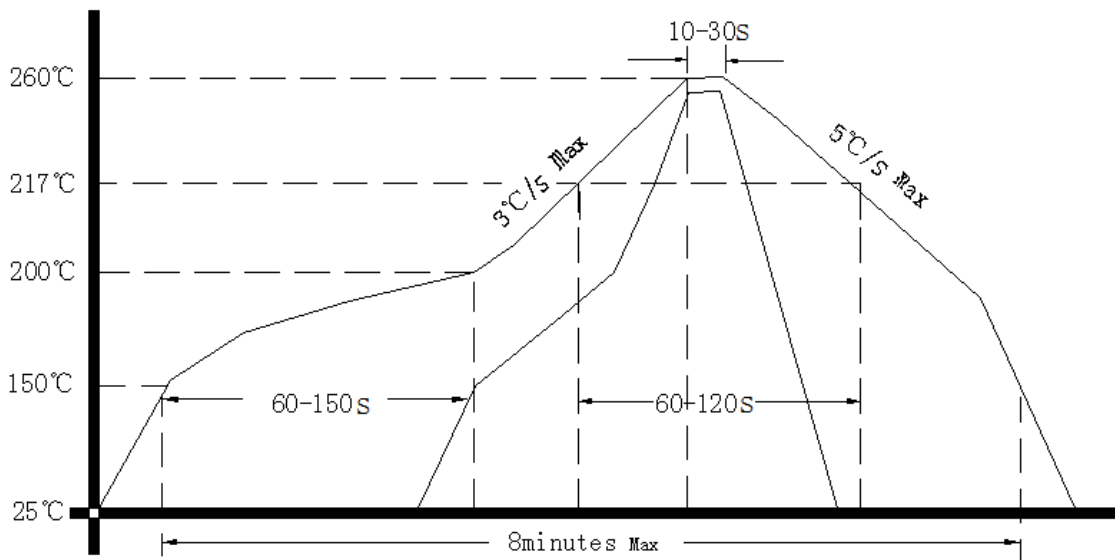
Note: Referential Weight 0.1g



### 3. Test Circuit

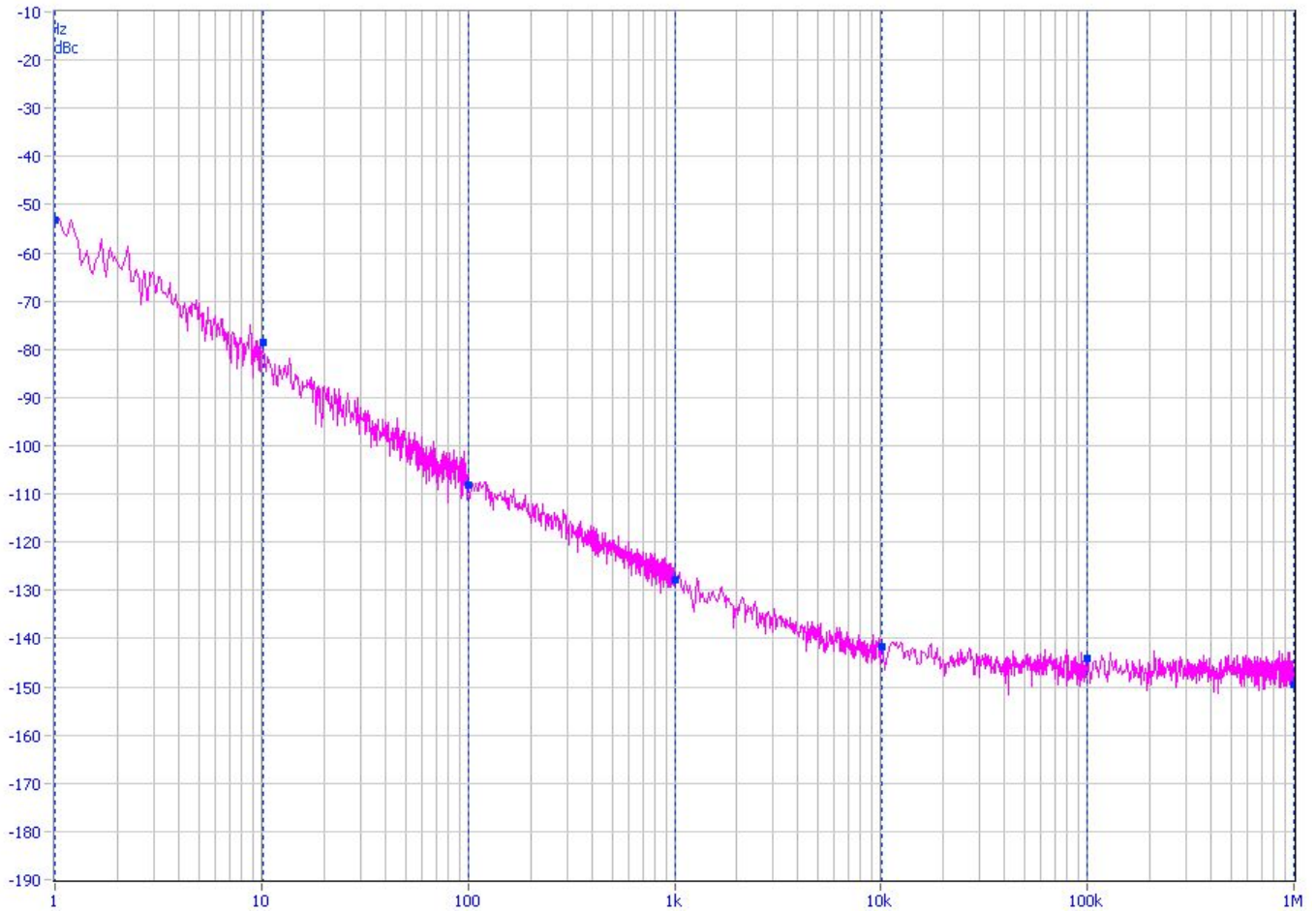


### 4. Reflow Soldering Curve (RoHS)





## 5. Phase Noise



## 6. Package: Tape & Reel (mm)

