

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

# DATASHEET

Standard:     **T21-F519-38.40MHz-A**    

P/N: \_\_\_\_\_

Plot			The Label
Drew	Audited	Approved	Stamp, please! Thanks!
Date: 2024.08.09			

**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





## 1、Electrical Parameters

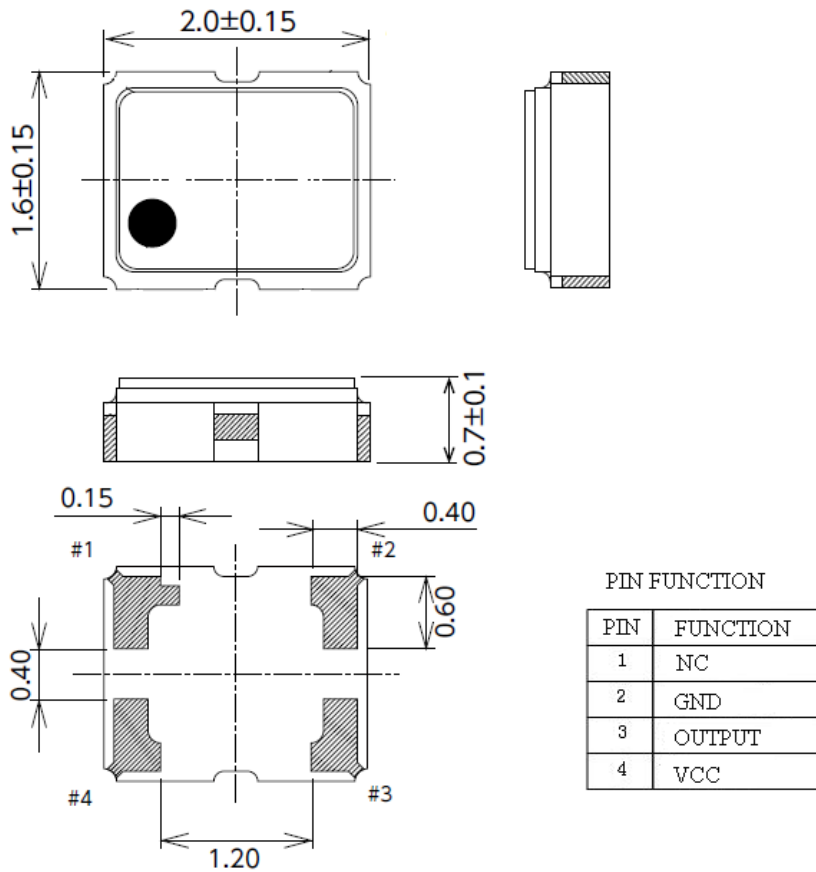
MODEL: T21-F519-38.40MHz-A						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency	38.40			MHz	
	Output Waveform	Clipped Sine Wave				
	Vp-p	0.8			V	
	Load	10KΩ//10pF				
Frequency Stabilities	Overall Stability	-4.6		+4.6	$\times 10^{-6}$	Including frequency stability vs. temperature tolerance ex factory, aging over 20 years, supply&load variation.
	Initial Frequency Tolerance	-1		+1	$\times 10^{-6}$	@ $25 \pm 2^\circ\text{C}$ , 2H, after 2 times reflow soldering, base on nominal frequency.
	vs. Operating Temperature Range	-0.28		+0.28	$\times 10^{-6}$	$T_A$ varied from $-40^\circ\text{C}$ to $105^\circ\text{C}$ , measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2$ , $V_{cc}=3.3\text{V}$ , $O_{load}=10\text{K}\Omega//10\text{pF}$ , temperature variable speed less than $2^\circ\text{C}$ per minute.
	Frequency Tolerance vs. Supply Voltage	-0.2		+0.2	$\times 10^{-6}$	measurement referenced to frequency observed $T_A=25^\circ\text{C}$ , $V_{cc}$ varied from 3.135V to 3.465V, and $O_{Load}=10\text{K}\Omega//10\text{pF}$ .
	Frequency Tolerance vs. Load	-0.2		+0.2	$\times 10^{-6}$	10% load change measurement referenced to frequency observed with $T_A=25^\circ\text{C}$ , $V_{cc}=3.3\text{V}$ , and $O_{Load}=10\text{K}\Omega//10\text{pF}$ .
	Holdover	-0.37		+0.37	$\times 10^{-6}$	Including frequency stability over temp. and short term aging in 24h.
	Short Term		0.1	0.2	$\times 10^{-9}$	Allan Deviation (ADEV), tau=1 second, at constant temperature.
	Aging Tolerance Per Day	-0.02		+0.02	$\times 10^{-6}$	$T_A=25^\circ\text{C}$ , $V_{cc}=3.3\text{V}$ , and after 1h of operation.
	Aging Tolerance First Year	-1		+1	$\times 10^{-6}$	
	Aging Tolerance 20 Years	-3		+3	$\times 10^{-6}$	
Power Supply	Current consumption			3	mA	@ $25^\circ\text{C}$ , $V_{cc}=3.3\text{V}$ , $O_{Load}=10\text{K}\Omega//10\text{pF}$ .
	Supply Voltage	3.135	3.3	3.465	V	



Phase Nois @25± 2°C	Phase Noise @25±2°C		-85	-80	dBc/Hz	10Hz
			-115	-110		100Hz
			-135	-130		1KHz
			-150	-145		10KHz
			-155	-150		100KHz
			-155	-150		1MHz
Environmental Conditions	Operable Temperature	-40		+105	°C	
	Storage Temperature	-55		+105	°C	
	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 1.				
	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 (°C)	-10~35°C				



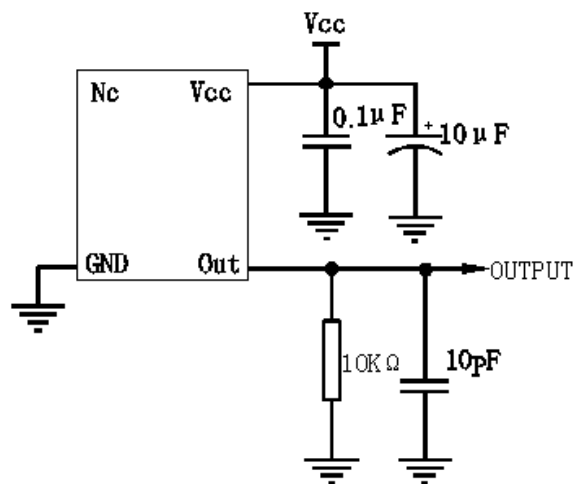
## 2、 Mechanical Structure(mm)



**Note1:** Tolerance ±0.1mm without mark

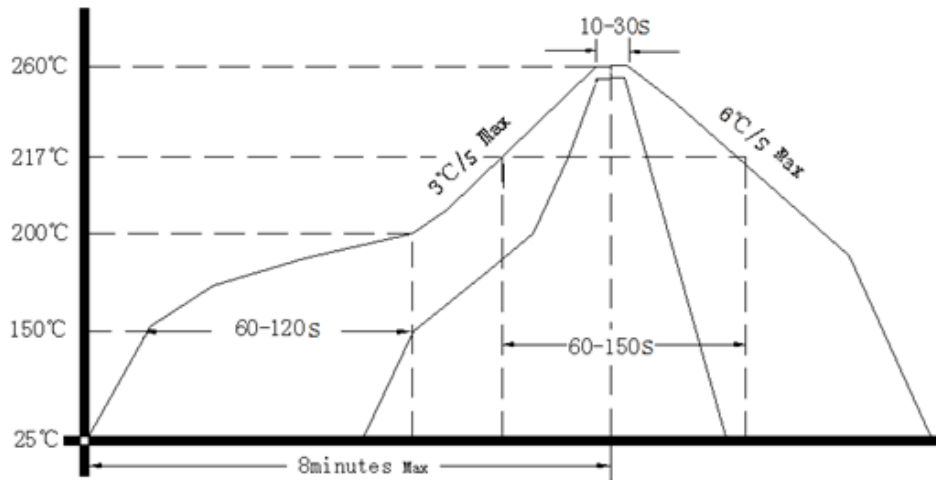
**Note2:** NC is not connect

## 3. Test Circuit





#### 4. Reflow Soldering Curve (RoHS)



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

