

**Customer Code:** \_\_\_\_\_

# DATASHEET

**DAPU P/N:** T2016G-B570-38.40MHz-N

DAPU			Customer Approval
Drew	Audited	Approved	
Jieshu ZHENG	Jianhua LIN	Gangtao FENG	
Date:	2023/12/14		
			Stamp, please! Thanks!

## Guangdong Dapu Telecom Technology Co.,Ltd

Bldg 5, SSL Modern Enterprise Accelerator Zone, Dongguan City, Guangdong Province, PRC China  
TEL: 0086-0769-88010888 FAX: 0086-0769-81800098



Guangdong Dapu Telecom Technology

<http://www.dptel.com>

Bldg 5, SSL Modern Enterprise  
Accelerator Zone, Dongguan City,  
Guangdong Province, PRC China  
TEL:0086-0769-88010888  
FAX:0086-0769-81800098

---

### Table of amendment

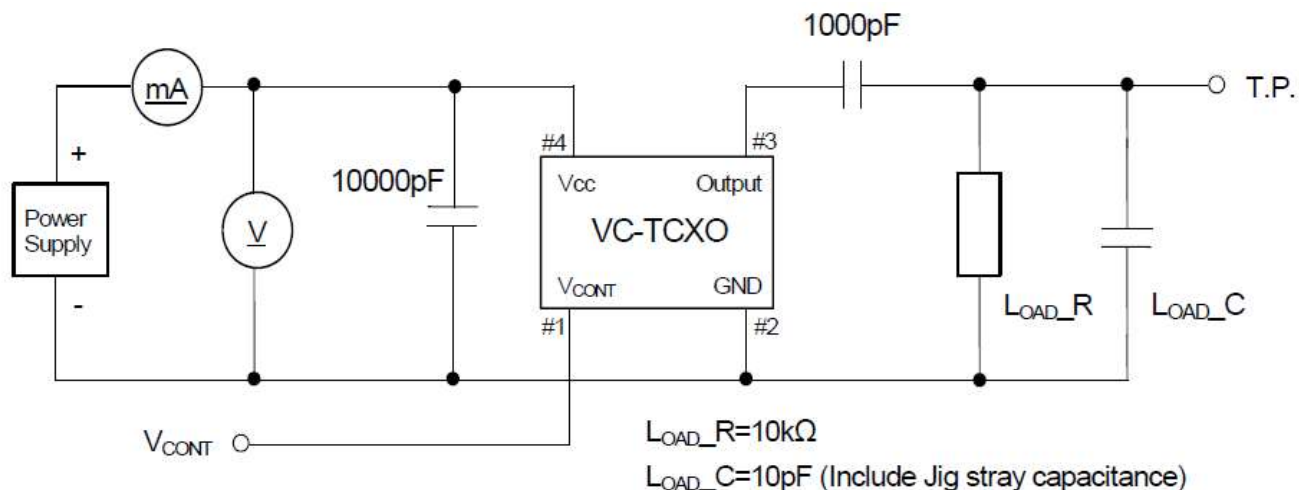
Version	Revision contents	Prepared by	Revised date
1.0			

## 1、Electrical Parameter

MODEL :		T2016G-B570-38.40MHz-N				
No.	Description	Parameters			Units	Test Condition
		Min.	Typ.	Max.		
Output	Frequency	38.40			MHz	
	Output Waveform	Clipped Sine Wave				
	V <sub>p-p</sub>	0.8			V	
	Spurious Suppression			-	dBc	
	Load	10KΩ//10pF				
Frequency Stabilities	Frequency Tolerance	-1.5		1.5	×10 <sup>-6</sup>	@25±2°C, 2H, after 2 times reflow soldering, base on nominal frequency.
	vs. Temperature	-0.5		0.5	×10 <sup>-6</sup>	-40°C to 85°C, Ref to Frequency(T <sub>A</sub> =+25°C)
	vs. Supply Voltage	-0.2		0.2	×10 <sup>-6</sup>	measurement referenced to frequency observed T <sub>A</sub> =25°C, V <sub>cc</sub> = 3.3±5%, and O <sub>Load</sub> =10KΩ//10 pF.
	vs. Load	-0.2		0.2	×10 <sup>-6</sup>	10% load change measurement referenced to frequency observed with T <sub>A</sub> =25°C, V <sub>cc</sub> =3.3V, and O <sub>Load</sub> =10KΩ//10pF.
	Aging Tolerance 1 Year	-1		1	×10 <sup>-6</sup>	T <sub>A</sub> =25°C, V <sub>cc</sub> =3.3V, and after 1h of operation.
	Frequency Slope	-		-	ppm/°C	T <sub>A</sub> varied from -40°C to 85°C
Power Supply	Current consumption			1.5	mA	@25°C, V <sub>cc</sub> =3.3V, O <sub>Load</sub> =10KΩ//10pF.
	Start up Time			2	ms	More than 90% of final output voltage
	Supply Voltage	1.71	1.8	1.89	V	
SSB Phase Noise	Phase Noise@25±2°C			-	dBc/Hz	10Hz
				-		100Hz
				-130		1KHz
				-		10KHz
				-		100KHz
				-		1MHz

Control Voltage	Control Voltage Range	+0.3	+0.9	+1.5	V	
	Frequency Control Range	±9		±15	ppm	$V_{CONT}=+0.3V\sim+1.5V(Ref.+0.9)$
Environmental Conditions	Operable Temperature	-40		85	°C	
	Storage Temperature	-40		85	°C	
	ESD Level	Human Body Model, class 2: 2000V; ANSI/ESDA/JEDEC JS 001 2010.				
		Machine Model, class B: 200V; 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 direction s X ,Y, Z ), IEC 68-2-27 Test Ea/Severity 50A.					
Full Package Storage	Relative humidity (%)	20%~70%				
	Load	10KΩ//10pF				

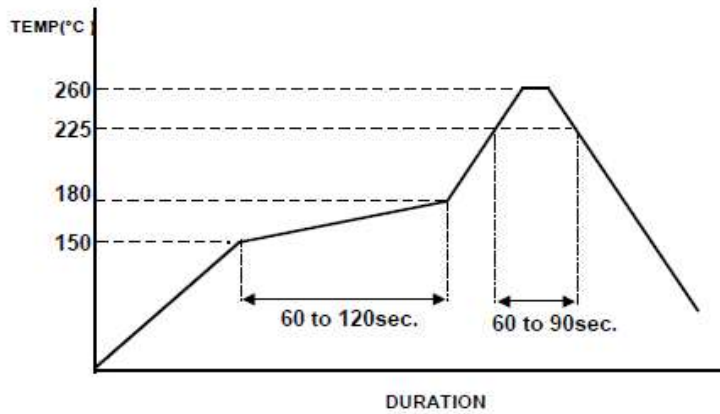
## 2 Test Circuit



### 3. Reflow Soldering Curve (RoHS)

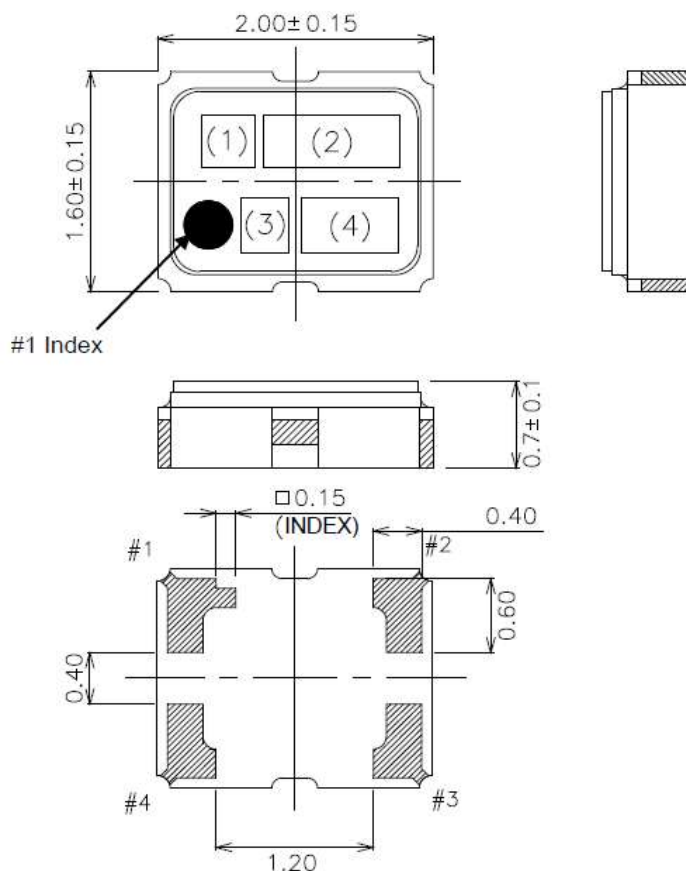
Condition of temperature profile(Refer to Fig.1)

Soldering peak temp.+260°C



(Fig.1)

### 4. Mechanical Structure & Marking



#### Pin Connections

Pin No.	Connection
#1	Vcont
#2	GND
#3	Output
#4	Vcc

#### Marking

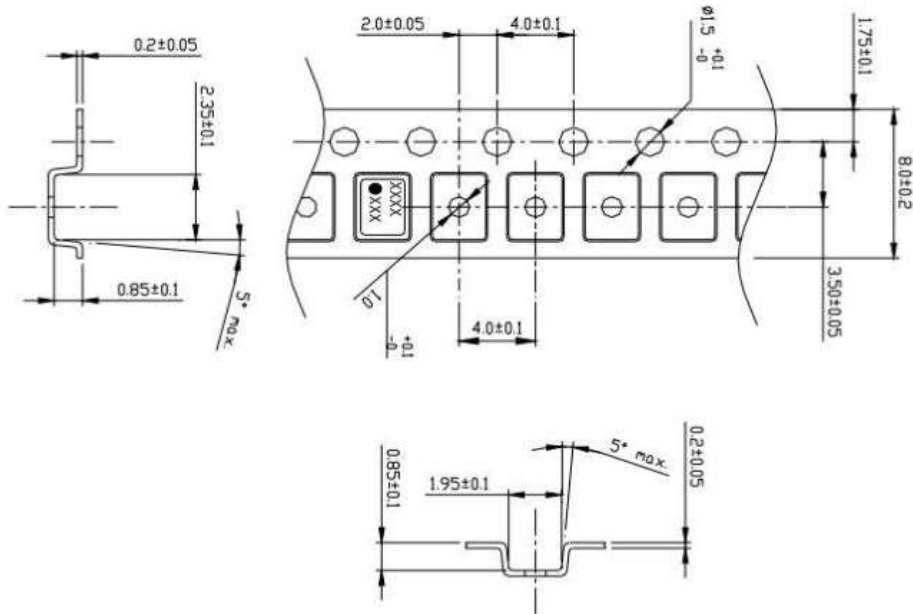
- (1) Model code AN
- (2) Frequency 38.4 (MHz, 3digits)
- (3) Logo D
- (4) Date code Year (1digit) +Week (2digits)  
e.g.2015/1/1 → 501

unit: mm

Dimensional Tolerance: ±0.1

(Unless otherwise noted)

## 5、 Packing Information

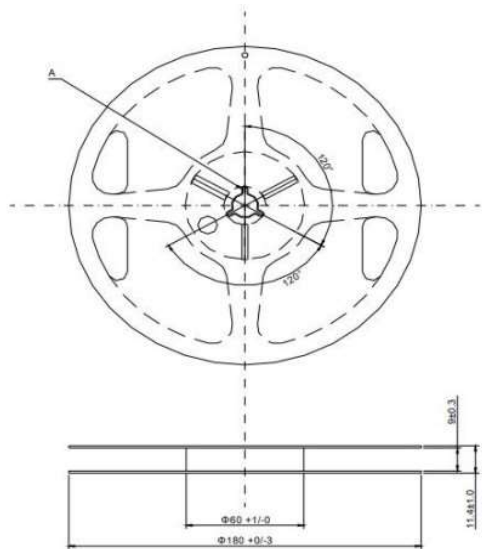


1. Clearance of an embossing tape, and a product unit: mm

Direction	Pocket size	TCXO size	Clearance
L	$2.35 \pm 0.10$	$2.00 \pm 0.15$	$0.35 \pm 0.25$
W	$1.95 \pm 0.10$	$1.60 \pm 0.15$	$0.35 \pm 0.25$
H	$0.85 \pm 0.05$	$0.70 \pm 0.10$	$0.15 \pm 0.15$

2. Quality : Polystyrene (Conductivity)

3. Tensile strength of an embossing tape : more than 14N



Material: Polystyrene (Conductivity)  
unit:mm

Section A

