

Customer Code: _____

DATASHEET

DAPU P/N: T2016G-B510CK-32.00MHz-D0

DAPU			Customer Approval
Drew	Audited	Approved	
Jieshu ZHENG	Jianhua LIN	Gangtao FENG	
Date:	2024/4/24		
			Stamp, please! Thanks!

Guangdong Dapu Telecom Technology Co.,Ltd

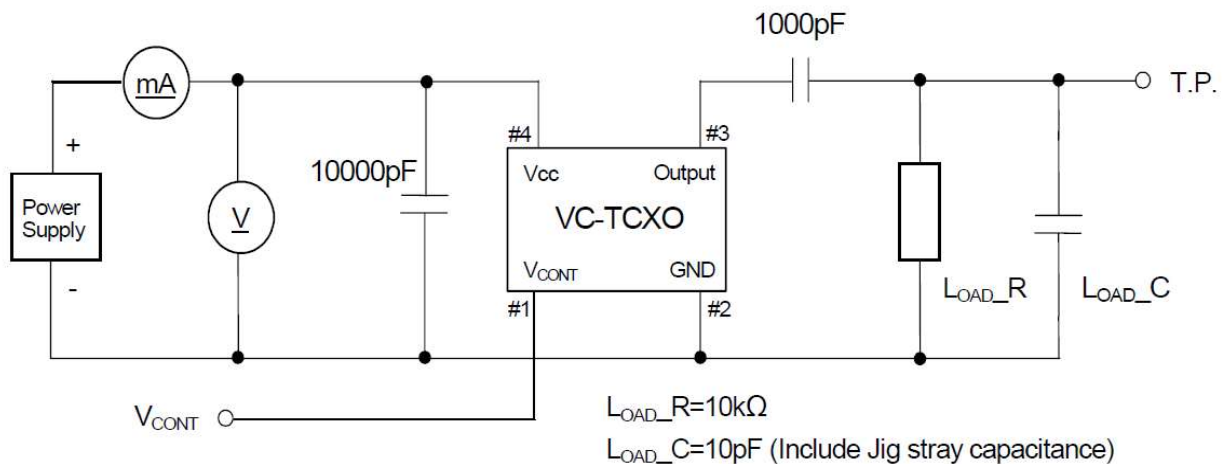
Bldg 5, SSL Modern Enterprise Accelerator Zone, Dongguan City, Guangdong Province, PRC China
TEL: 0086-0769-88010888 FAX: 0086-0769-81800098

1、Electrical Parameter

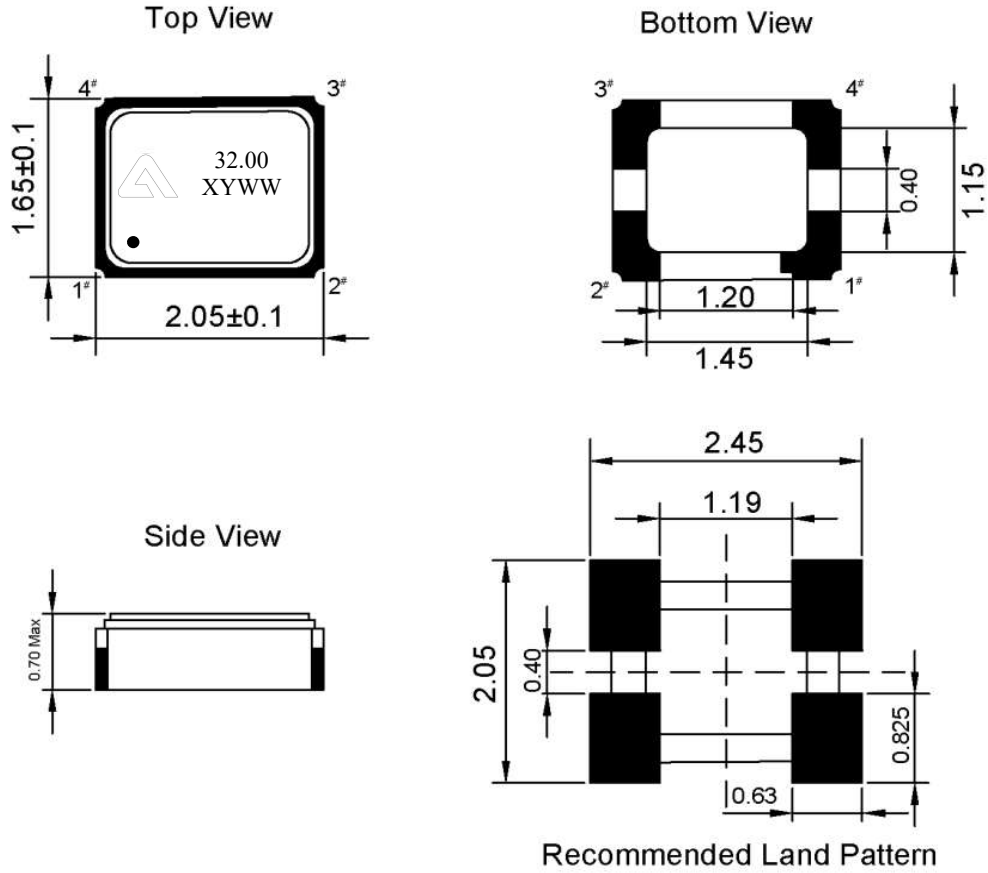
MODEL:		T2016G-B510CK-32.00MHz-D0					
No.	Description	Parameters			Units	Test Condition	
		Min.	Typ.	Max.			
Output	Frequency	32.000			MHz		
	Output Waveform	Clipped Sine Wave					
	Vp-p	0.8			V		
	Spurious Suppression			-8	dBc		
	Load	10KΩ//10pF					
Frequency Stabilities	Frequency Tolerance	-1.5		1.5	$\times 10^{-6}$	@25±2°C, 2H, after 2 times reflow soldering, base on nominal frequency.	
	vs. Temperature	-0.5		0.5	$\times 10^{-6}$	T _A varied from -40°C to 85°C, 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°C per minute.	
	vs. Supply Voltage	-0.2		0.2	$\times 10^{-6}$	measurement referenced to frequency observed T _A =25°C, V _{cc} =3.3±5%, and O _{Load} =10KΩ//10pF.	
	vs. Load	-0.2		0.2	$\times 10^{-6}$	10% load change measurement referenced to frequency observed with T _A =25°C, V _{cc} =3.3V, and O _{Load} =10KΩ//10pF.	
	Slope	-0.1		0.1	ppm/°C	TA varied from -40'C to 85°C	
	G-sensitivity			1	2	ppb/g	Random vibration 30Hz to 1.5kHz.3 axes.
	Aging Tolerance 1 Year	-1		1	$\times 10^{-6}$	T _A =25°C, V _{cc} =3.3V, and after 1h of operation.	
Power Supply	Current consumption			2	mA	@25°C, V _{cc} =3.3V, O _{Load} =10KΩ//10pF.	
	Start up Time			2	ms	More than 90% of final output voltage	
	Supply Voltage	1.68		3.63	V		
SSB Phase Noise	Phase Noise@25±2°C			-	dBc/Hz	1Hz	
				-		10Hz	
				-		100Hz	
				-130		1KHz	
				-		10KHz	
				-		100KHz	
				-		1MHz	

Voltage Control	Frequency turning range	-15		-9	$\times 10^{-6}$	Vc=0.5V. measurement referenced to Vc=1.5V
		-1.5		1.5	$\times 10^{-6}$	Vc=1.5V. measurement referenced to Exactly 32.00MHz
		9		15	$\times 10^{-6}$	Vc=2.5V. measurement referenced to Vc=1.5V
Environmental Conditions	Operable Temperature	-40		85	°C	
	Storage Temperature	-55		105	°C	
	ESD Level	Human Body Model, class 2: 2000V to 4000V; ANSI/ESDA/JEDEC JS-001-2010.				
		Machine Model, class B: 200V to 400V; JEDEC JESD22-A115C.				
	Moisture Sensitivity Level	Level 3.				
	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



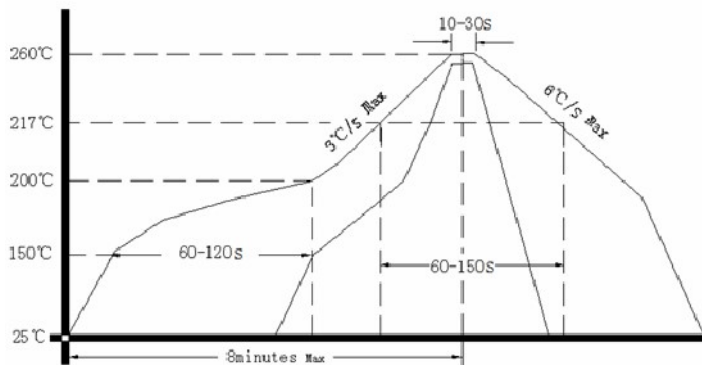
3、 Mechanical Structure(mm)



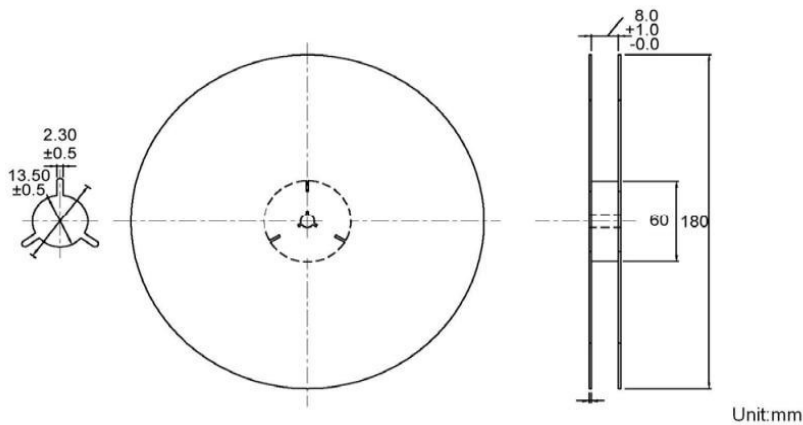
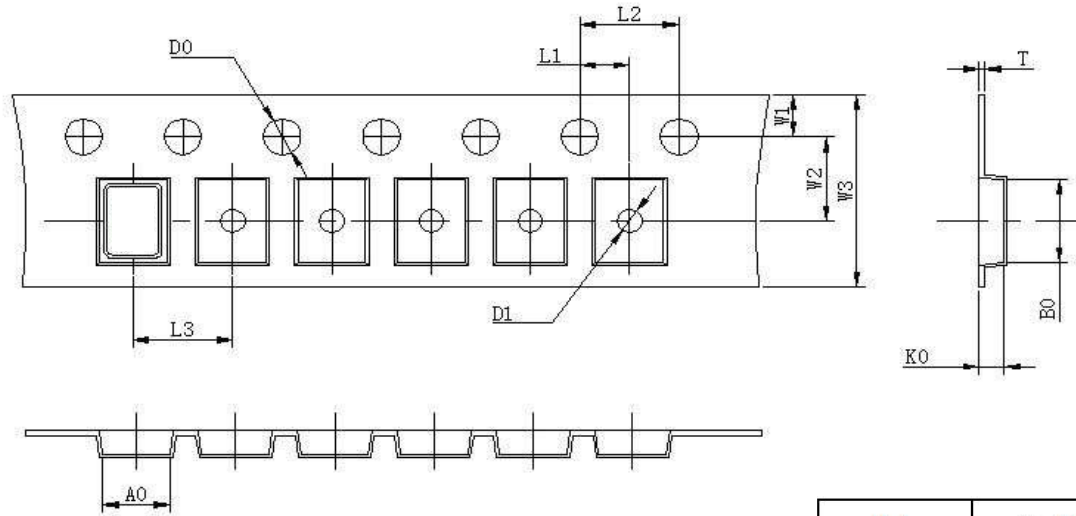
Note: X representative internal code ,Y representative year, WW representative week

PIN NAME	CONNECTION
PIN1	VC
PIN2	GND
PIN3	OUTPUT
PIN4	VCC

4、 Reflow Soldering Curve (RoHS)



5、 Package: Tape & Reel (mm)



L1	2.00 ±0.1
L2	4.00 ±0.1
L3	4.00 ±0.1
D0	1.50 ±0.1
D1	0.6 ±0.1
W0	8.50 ±0.2
W1	1.75 ±0.1
W2	3.50 ±0.1
W3	8.00 ±0.1
A0	1.85 ±0.1
B0	2.25 ±0.1
K0	0.65 ±0.1
T	0.25 ±0.05