

Customer Code: _____

DATASHEET

DAPU P/N: T2016C-B019CD-19.20MHz-X337

DAPU			Customer Approval
Drew	Audited	Approved	
Jieshu ZHENG	Jianhua LIN	Gangtao FENG	
Date:	2025/2/8		
			Stamp, please! Thanks!

Guangdong Dapu Telecom Technology Co.,Ltd

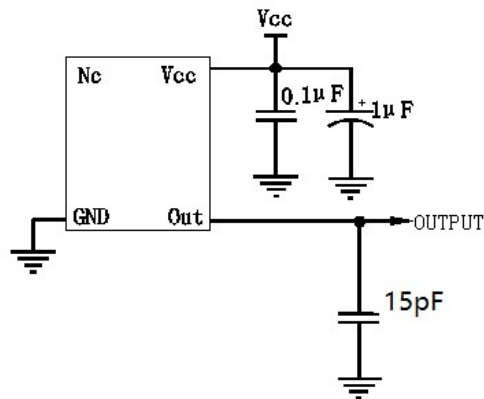
Bldg 5, SSL Modern Enterprise Accelerator Zone, Dongguan City, Guangdong Province, PRC China
TEL: 0086-0769-88010888 FAX: 0086-0769-81800098

1. Electrical Parameter

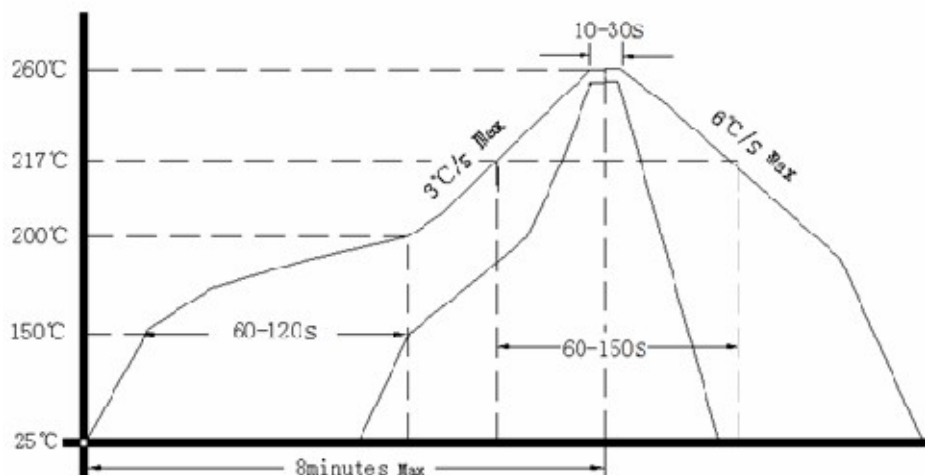
MODEL:		T2016C-B019CD-19.20MHz-X337				
No.	Description	Parameters			Units	Test Condition
		Min.	Typ.	Max.		
Output	Frequency	19.200			MHz	
	Output Waveform	CMOS			-	
	High Level	0.9V _{DD}			V	
	Low Level			0.1V _{DD}	V	
	Rise & Fall Time			5	ns	10% V _{DD} to 90% V _{DD}
	Symmetry	45		55	%	
	Load	15pF			-	
Frequency Stabilities	Frequency Tolerance	-1.5		1.5	×10 ⁻⁶	@25±2°C, 2h, after 2 times reflow soldering, base on nominal frequency.
	vs. Temperature	-0.5		0.5	×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} =15pF, temperature variable speed less than 2°C per minute.
	vs. Supply Voltage	-0.1		0.1	×10 ⁻⁶	measurement referenced to frequency observed T _A =25°C, V _{cc} =3.3V±5%, and O _{Load} =15pF.
	vs. Load	-0.1		0.1	×10 ⁻⁶	10% load change measurement referenced to frequency observed with T _A =25°C, V _{cc} =3.3V, and O _{Load} =15pF.
	Aging Tolerance 1 Year	-1		1	×10 ⁻⁶	T _A =25°C, V _{cc} =3.3V, and after 1h of operation.
Power Supply	Current consumption			5	mA	@25°C, V _{cc} =3.3V, O _{Load} =15pF.
	Start up Time			2	ms	More than 90% of final output voltage.
	Supply Voltage	2.97	3.30	3.63	V	
SSB Phase Noise	Phase Noise@25±2°C			-80	dBc/Hz	10Hz
				-111		100Hz
				-135		1KHz
				-145		10KHz
				-153		100KHz
				-155		1MHz

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%				
	Temperature (°C)	-10~35°C				

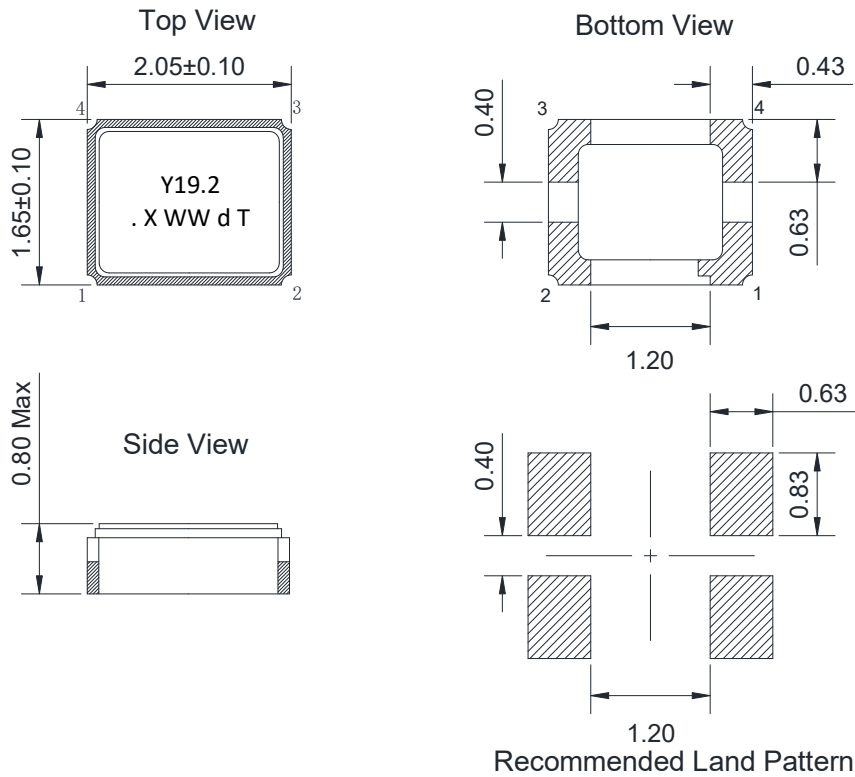
2. Test Circuit



3. Reflow Soldering Curve (RoHS)



4. Mechanical Structure(mm)



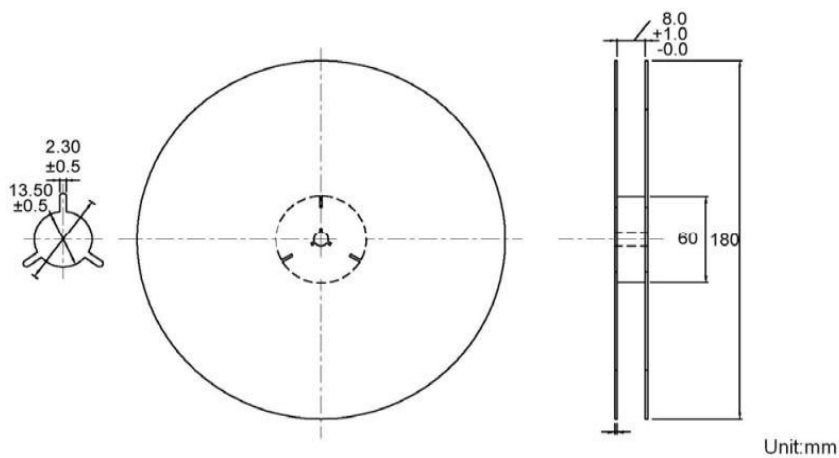
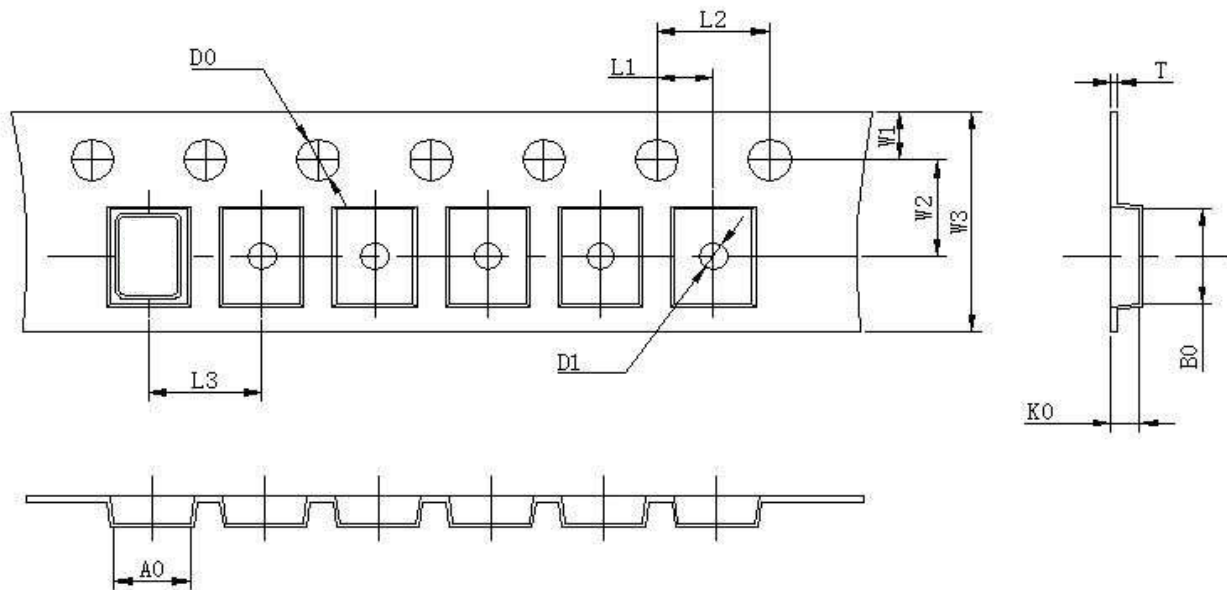
Note: The undimensioned tolerance is ± 0.1 mm.

PIN NAME	CONNECTION
PIN1	NC (No electrical connection)
PIN2	GND
PIN3	F _{OUT}
PIN4	V _{CC}

5. Marking Information

Y	Fixed code
19.2	Frequency 19.20MHz
X	Year
WW	Week
d	Fixed code
T	Fixed code
•	Pin1 Index

6. Packing Information



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