Customer Code : _____

DATASHEET

DAPU P/N: **T5032-F313-100.00MHz**

Customer P/N: _____

DAPU			Customer Approval
Drew	Audited	Approved	
Amway.wei	Carry . Wang	Jason Zhao	
Date: 2020.08.18			Stamp, please! Thanks!

Guangdong Dapu Telecom Technology Co.,Ltd

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Table of amendment

Version	Revision contents	Prepared by	Revised date
1.0	The first issued	Amway	2020.08.18

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1. Electrical Parameters

MODEL： T5032-F313-100.00MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		100.00		MHz	
	Output Waveform		LVCMOS			
	Output Low Voltage			0.33	V	V_{cc}=3.3V, O_{load}=15 pF
	Output High Voltage	2.97			V	V_{cc}=3.3V, O_{load}=15 pF
	Duty Cycle	45		55	%	@50%
	Rise / Fall Time （10%~90%）	0.8	1.2	1.9	ns	@25℃
	Start-up Time		2.5	3.5	ms	Time to first pulse, measured from the time Vcc reaches 90% of its final value. Vcc ramp time = 100 μs from 0V to Vcc.
	Impedance		17		Ohms	Impedance looking into output buffer. V_{cc}=3.3V.
	Load		15		pF	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.5		+0.5	$\times 10^{-6}$	T_A varied from -40℃ to 85℃, measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2$, V_{cc}=3.3V, V_c=1.5V , O_{load}=15 pF , temperature variable speed less than 2℃per minute.
	Initial Frequency Tolerance	-1		+1	$\times 10^{-6}$	Measurement referenced to frequency observed with T_A=25℃, V_{cc}=3.3V, V_c=1.5V, within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-0.03		+0.03	$\times 10^{-6}$	measurement referenced to frequency observed T_A=25℃, V_{cc} varied from 2.97V to 3.63V and O_{Load}=15 pF .
	Frequency Tolerance vs. Load	-0.01		+0.01	$\times 10^{-6}$	10% load change measurement referenced to frequency observed with T_A=25℃, V_{cc}=3.3V, V_c=1.5V, and O_{Load}=15 pF .
	Aging Tolerance 1 Year	-1		+1	$\times 10^{-6}$	At 25℃, after 2-days of continued operation. Aging is measured with respect to day 3.
	Aging Tolerance 20 Year	-2		+2	$\times 10^{-6}$	
Power Supply	Operating Current		52	66	mA	@25℃, V_{cc}=3.3V, V_c=1.5V, O_{Load}=15 pF .
	Supply Voltage	2.97	3.3	3.63	V	

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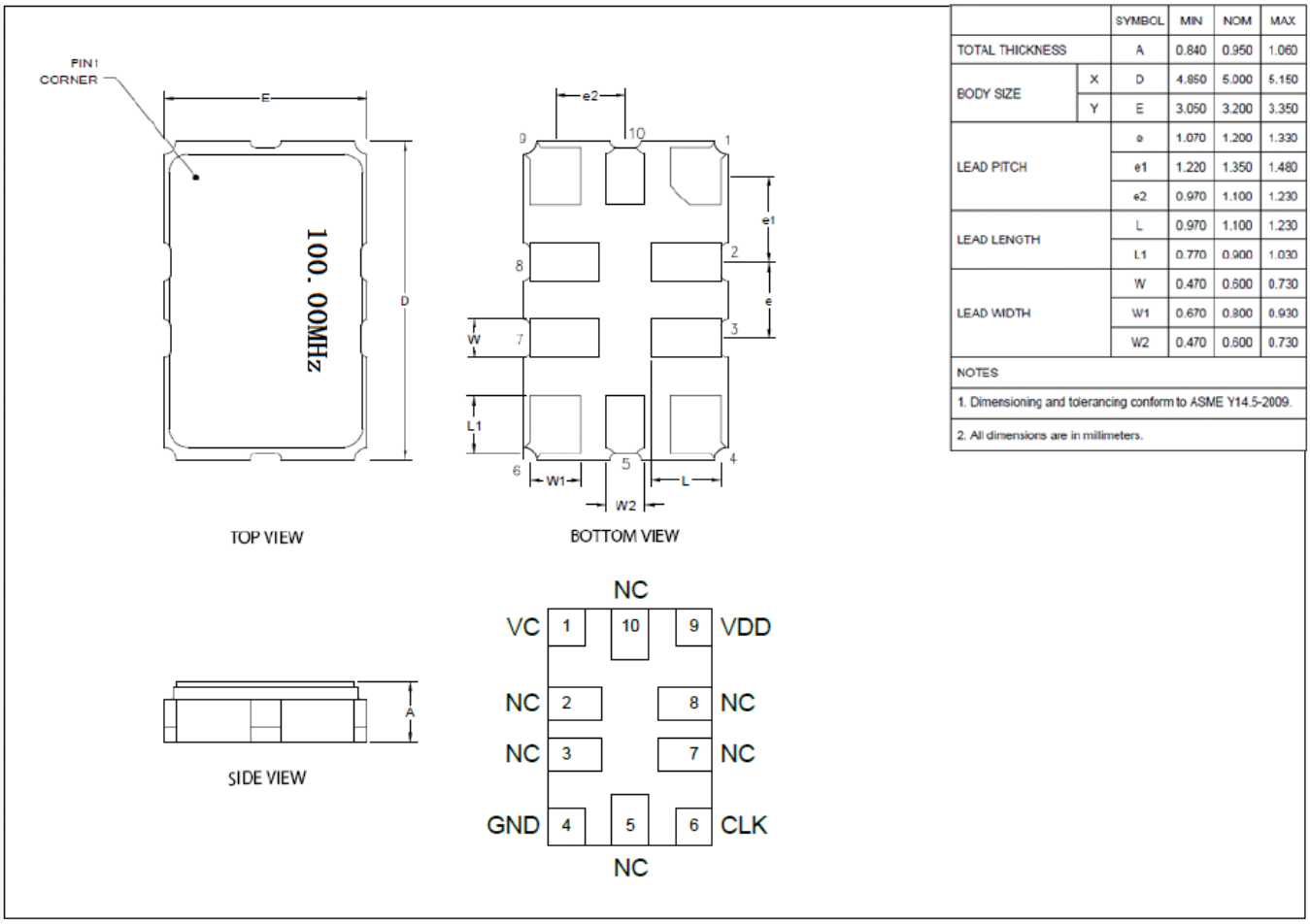
Voltage Control Characteristics	Frequency Tuning Range			-6	$\times 10^{-6}$	V_c=0V. measurement referenced to V_c=1.5V.
		-1		+1	$\times 10^{-6}$	V_c=1.5V. measurement referenced to Exactly 100.00MHz.
		+6			$\times 10^{-6}$	V_c=3.0V. measurement referenced to V_c=1.5V.
	Linearity		0.5	1	%	
	Slope	Positive				
	Input Bandwidth		10		kHz	
	Input Impedance	8			MΩ	
Phase Noise	Phase Noise @25℃		-61	-54	dBc/Hz	1Hz
			-89	-83		10Hz
			-107	-103		100Hz
			-128	-124		1KHz
			-133	-131		10KHz
			-133	-130		100KHz
			-150	-146		1MHz
			-157	-151		5MHz
			-157	-152		10MHz
			-159	-152		20MHz
Spurious	Spurious		-91	-86	dBc	
RMS Period Jitter	RMS Period Jitter		1.0	1.8	ps	
Environmental Conditions	Operable Temperature	-40		+85	℃	
	Storage Temperature	-65		+125	℃	
	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 (℃)	-10~35℃				

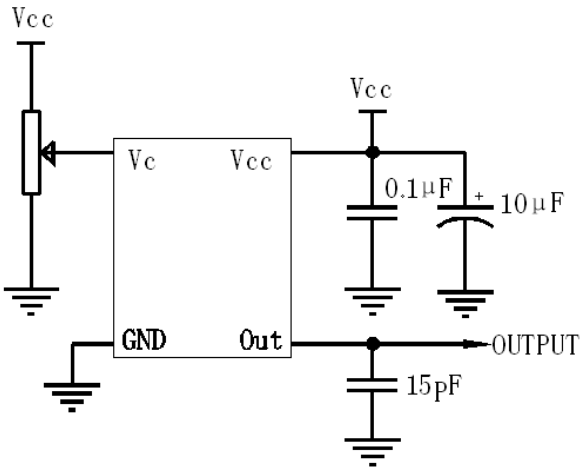
2. Mechanical Structure(mm)



		SYMBOL	MIN	NOM	MAX
TOTAL THICKNESS		A	0.840	0.950	1.060
BODY SIZE	X	D	4.850	5.000	5.150
	Y	E	3.050	3.200	3.350
LEAD PITCH		e	1.070	1.200	1.330
		e1	1.220	1.350	1.480
		e2	0.970	1.100	1.230
LEAD LENGTH		L	0.970	1.100	1.230
		L1	0.770	0.900	1.030
LEAD WIDTH		W	0.470	0.600	0.730
		W1	0.670	0.800	0.930
		W2	0.470	0.600	0.730
NOTES					
1. Dimensioning and tolerancing conform to ASME Y14.5-2009.					
2. All dimensions are in millimeters.					

Note1: NC is not connect

3. Test Circuit



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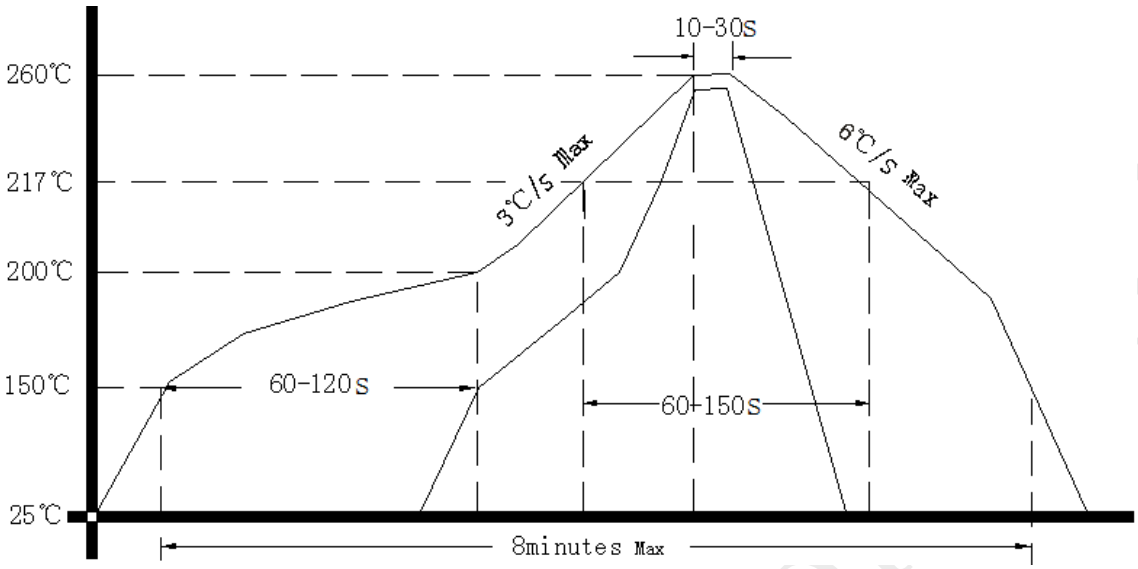
4. Reflow Soldering Curve (RoHS)



Note: If soldering with a hot air gun, ensure the temperature ＜320℃， soldering time ＜15 seconds.

5. Package: Tape & Reel (mm)