Customer Code : _____

DATASHEET

DAPU P/N: **T75B-1807-19.20MHz**

Customer P/N: _____

DAPU			Customer Approval
Drew	Audited	Approved	
Amway.wei	Carry.Wang	Jason Zhao	
Date: 2020.04.26			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	2020.04.26

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1. Electrical Parameters

MODEL：T75B-1807-19.20MHz						
Item	Parameters	Electrical Spec			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		19.20		MHz	
	Output Waveform		HCMOS			
	Output Low Voltage			0.33	V	V_{cc}=3.3V, O_{load}=15 pF
	Output High Voltage	2.7			V	V_{cc}=3.3V, O_{load}=15 pF
	Duty Cycle	45	50	55	%	
	Rise / Fall Time（10%~90%）			8	ns	@25℃
	Start up Time			10	ms	90% V_{cc} to correct frequency output time
	Load	13.5	15	16.5	pF	
	Spurious Suppression			-109	dBc	<1MHz
				-99	dBc	≥1MHz
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.1		+0.1	$\times 10^{-6}$	T_A varied from-40℃ to 85℃, measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2$, V_{cc}= 3.3V, $O_{load=}$ 15pF, 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 within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-0.05		+0.05	$\times 10^{-6}$	measurement referenced to frequency observed T_A=25℃, V_{cc} varied from 3.135V to 3.465V, and O_{Load}= 15pF.
	Frequency Tolerance vs. Load	-0.05		+0.05	$\times 10^{-6}$	10% load change measurement referenced to frequency observed with T_A= 25℃, V_{cc}=3.3V, O_{Load}= 15pF.
	Short-Term Frequency Stability	-0.1		+0.1	$\times 10^{-6}$	Temperature stability, no EMI\EMC or other interference，test after power for 1hour ref. to 25℃; 1s.
	Frequency Slope	-0.05		+0.05	$\times 10^{-6}$/℃	T_A varied from-40℃ to 85℃, Temperature ramp 2℃/minute，Test interval: test per 1℃
		-0.01		+0.01	$\times 10^{-6}$/℃	T_A varied from 40℃ to 60℃, Temperature ramp 2℃/minute，Test interval: test per 1℃
	G Sensitivity		2		$\times 10^{-9}$/g	Gamma vector of all three axes from 30Hz to 1500Hz.

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Tolerance(Total)	Tolerance(Total)	-4.6		+4.6	$\times 10^{-6}$	After reflow, Include: freq vs. operating temperature range, initial, load, supply stability and 10 years aging.
Aging (25℃)	Aging Tolerance 1 Year	-1		+1	$\times 10^{-6}$	
	Aging Tolerance 10 Year	-3		+3	$\times 10^{-6}$	
	Aging Tolerance 20 Year	-4.6		+4.6	$\times 10^{-6}$	
Power Supply	Supply Voltage	3.135	3.3	3.465	V	
	Supply Current			10	mA	@25℃, V_{cc}=3.3V.
Phase Noise	Phase Noise @25℃			-53	dBc/Hz	1Hz
				-85		10Hz
				-105		100Hz
				-126		1KHz
				-136		10KHz
				-148		100KHz
				-150		1MHz
				-152		5MHz
Jitter	Jitter			0.8	Ps-RMS	12KHz-9.6MHz
Environmental Conditions	Operable Temperature	-40		+85	℃	
	Storage Temperature	-55		+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 3.				
	Vibration	Test Condition: 0.75mm ;acceleration:10g;10Hz～2000Hz, one cycle per 30 min, test 2 hours. (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	Relative humidity (%)	20%～70%				
	Temperature (℃)	-10~35℃				

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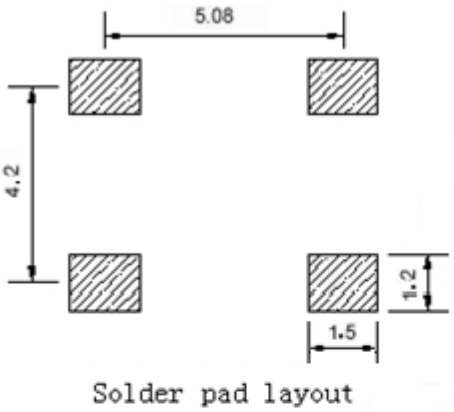
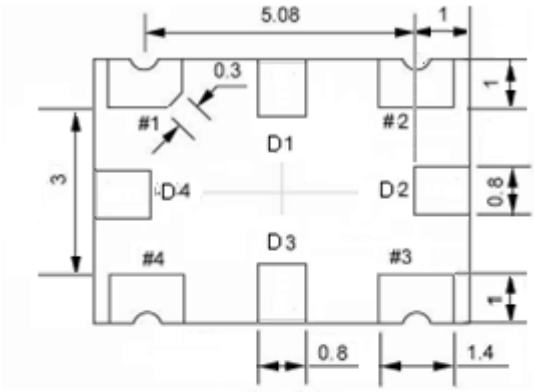
2. Mechanical Structure (mm)

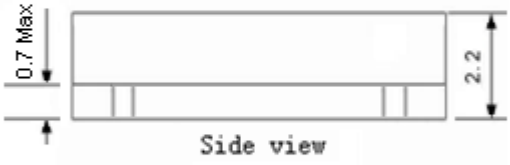


Solder pad layout

Right view



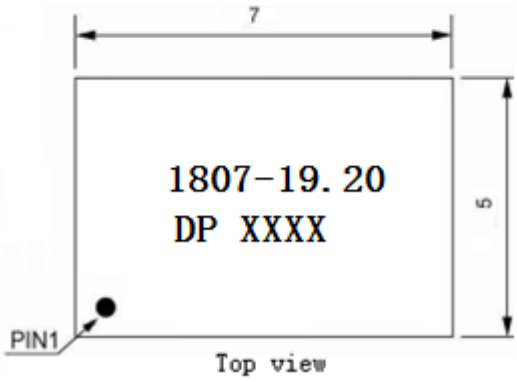
Bottom view



Side view

PIN FUNCTION

PIN	NOTATION	FUNCTION
D1, D2, D3, D4	NC	Not Connect
1	NC	Not Connect
2	GND	GND
3	OUTPUT	RF Output
4	VCC	Supply Voltage



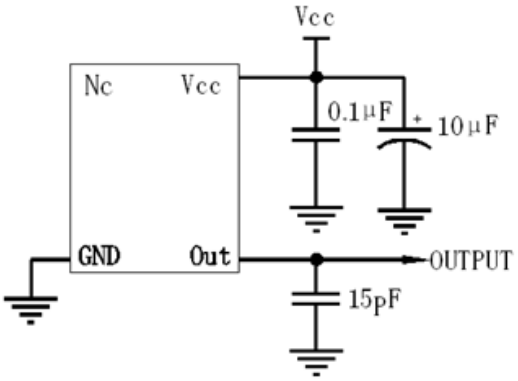
Top view

Note1: Tolerance ±0.20mm without mark

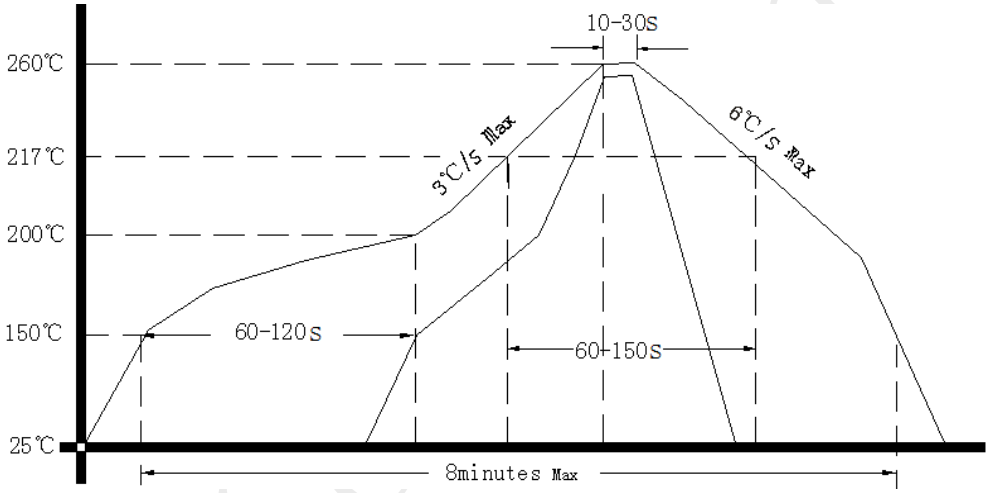
Note2: The first two xx representative: year
After two xx representative: week

Note3: Referential Weight 0.2g

3. Test circuit



4. Reflow Soldering Curve (RoHS)



5. Package: Tape & Reel (mm)