Customer Code : A008

DATASHEET

DAPU P/N: **T11A-0801-32.768MHz**

Customer P/N:

DAPU			Customer Approval
Drew	Audited	Approved	
Amway.wei	Carry.Wang	James.Liu	
Date: 2017.08.14			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	2016.01.21
1.1	Add “Environmental requirements” The “Output Low/High Voltage”, “Load” and “Mechanical Structure” changed	Amway	2017.08.14

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1. Electrical Parameters

MODEL： T11A-0801-32.768MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		32.768		MHz	
	Output Waveform		HCMOS			
	Output Low Voltage			0.5	V	V_{cc}=5.0V, O_{load}=25pF
	Output High Voltage	4.5			V	V_{cc}=5.0V, O_{load}=25pF
	Duty Cycle	45	50	55	%	@50%
	Rise / Fall Time （10%~90%）			5	ns	@25℃
	Load		25		pF	
	Spurious Suppression			-35	dBc	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-2.5		+2.5	$\times 10^{-6}$	T_A varied from-40℃to -20℃, measurement referenced to frequency observed with T_A=25℃, V_{cc}=5.0V, O_{load}=25pF, temperature variable speed less than 2℃per minute.
		-1		+1	$\times 10^{-6}$	T_A varied from-20℃to 70℃, measurement referenced to frequency observed with T_A=25℃, V_{cc}=5.0V, O_{load}=25pF, temperature variable speed less than 2℃per minute.
		-2.5		+2.5	$\times 10^{-6}$	T_A varied from 70℃to 85℃, measurement referenced to frequency observed with T_A=25℃, V_{cc}=5.0V, O_{load}=25pF, 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℃±2℃, 10% load change and V_{cc} varied from 4.75V to 5.25V, within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-0.2		+0.2	$\times 10^{-6}$	measurement referenced to frequency observed T_A=25℃, V_{cc} varied from 4.75V to 5.25V, and O_{Load}=25pF.
	Frequency Tolerance vs. Load	-0.1		+0.1	$\times 10^{-6}$	10% load change measurement referenced to frequency observed with T_A=25℃,V_{cc}=5.0V, O_{Load}=25pF.

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	Aging Tolerance 1 Year	-1		+1	$\times 10^{-6}$	T_A=25℃, V_{cc}=5.0V, and after 1h of operation.
	Aging Tolerance 10 Years	-5		+5	$\times 10^{-6}$	
Power Supply	Current Consumption			20	mA	@25℃, V_{cc}=5.0V, O_{load}=25pF
	Supply Voltage	4.75	5.0	5.25	V	
	Absolute Supply Voltage	4.0	5.0	6.0	V	
Phase Noise	Phase Noise			-70	dBc/Hz	10Hz
				-105		100Hz
				-125		1KHz
				-135		10KHz
				-140		100KHz
Environmental Conditions	Operable Environmental Condition	Temperature：-40℃~+85℃				
		Humidity: 10%~90%RH				
		Working Air Pressure: 76kPa~106kPa				
	Storage/ Transportation Condition	Temperature：-55℃~+95℃				
		Humidity: 5%~95%RH				
		Working Air Pressure: 76kPa~106kPa				
	Bump	400m/s^2; 6ms; (4000±10 times for each 3 directions X ,Y , Z) .IEC 60068-2-29 Test Eb.				
	Vibration	Test Condition: 0.75mm ; 10Hz～55Hz, one cycle per 30 min. (each 3 directions X ,Y , Z) .IEC 60068-2-06 Test Fc.				
	Shock	1000 m/s^2; 6ms; half sine wave (3 times for each 6 directions X ,Y, Z),IEC 60068-2-27 Test Ea.				
	Environmental requirements	lead-free, meet ROHS requirements				
	After test, all specifications still meet the requirements.					
Producibility	Solderability	IEC 600679-1 1997 4.6.3.1 Solderability ; GB/T2423.28-2005.				
	Resistant To Solding Heat	IEC 600679-1 1997 4.6.3.2 Resistance to soldering heat ; GB/T2423.28-2005.				
	Inner Technology	IPCA-610D（Acceptability of Electronic Assemblies）.				
	Tensile Strength Of Leads	IEC 600679-1 1997 4.6.1.1 Tensile and thrust tests on terminations.				
Full Package Storage	Relative humidity (%)	20%～70%				
	Temperature (℃)	-10~35℃				

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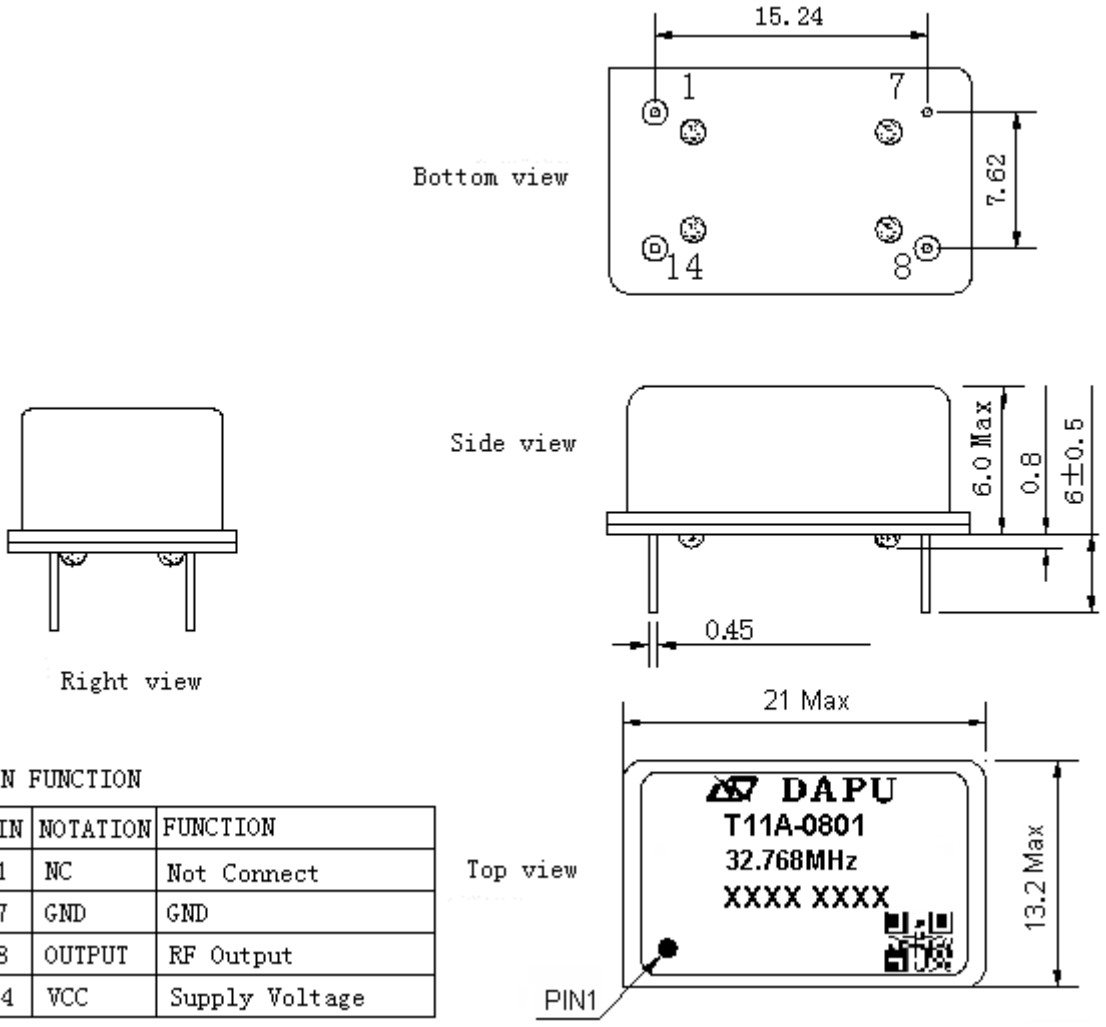
2. Mechanical Structure(mm)



PIN FUNCTION

PIN	NOTATION	FUNCTION
1	NC	Not Connect
7	GND	GND
8	OUTPUT	RF Output
14	VCC	Supply Voltage

Note1: Tolerance ±0.50mm without mark

Note2: The first two xx representative: week
After two xx representative: year
At last four xxxx representative: serial number

Note3: Referential weight 3.6g

Note4: NC is not connect

Note5: Material composition and coating :
Pad/terminals：Fe-Co-Ni Alloy; Nickel Plating
Base: Fe
Cover：Stainless steel; Nickel Plating

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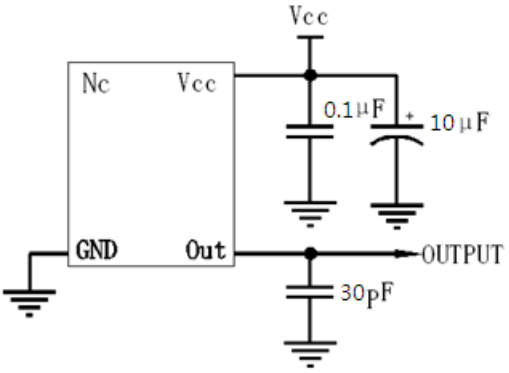
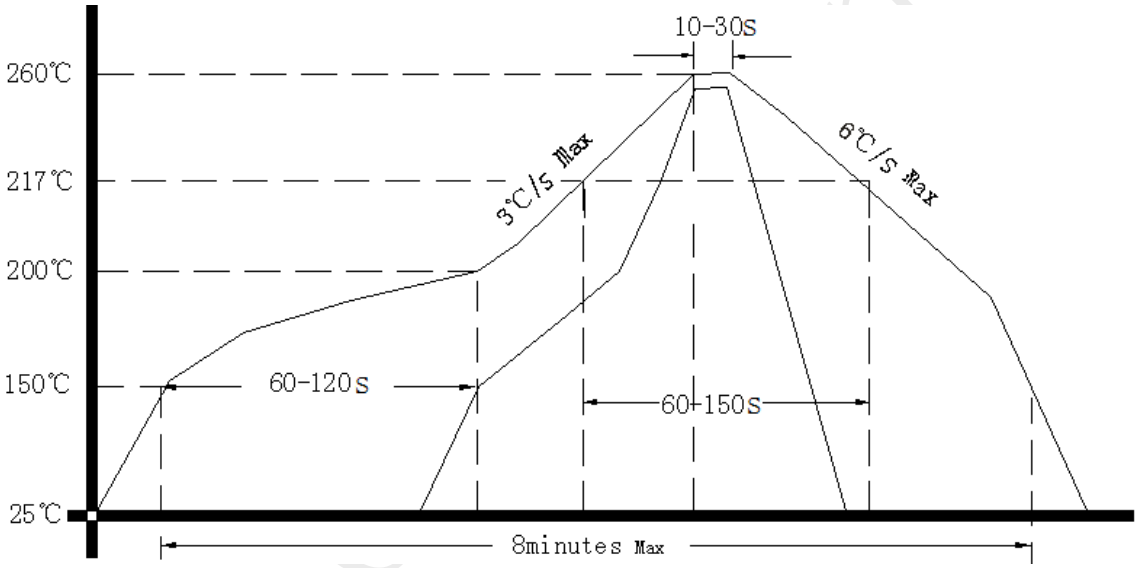
3. Test circuit



4. Reflow Soldering Curve (RoHS)



5. Package: PVC Tube,10pcs（mm）