

Customer Code : \_\_\_\_\_

# DATASHEET

DAPU P/N: M11F-K412-92.16MHz

Customer P/N: \_\_\_\_\_

DAPU			Customer Approval
Drew	Audited	Approved	Stamp, please! Thanks!
Date: 2020.08.11			

## Guangdong Dapu Telecom Technology Co.,Ltd

Bldg13-16,.N.Ind.Zone,SSL Industry Park, Dongguan City, Guangdong Province, China

TEL: 0086-0769-88010888 FAX: 0086-0769-81800098





## 1. Electrical Parameters

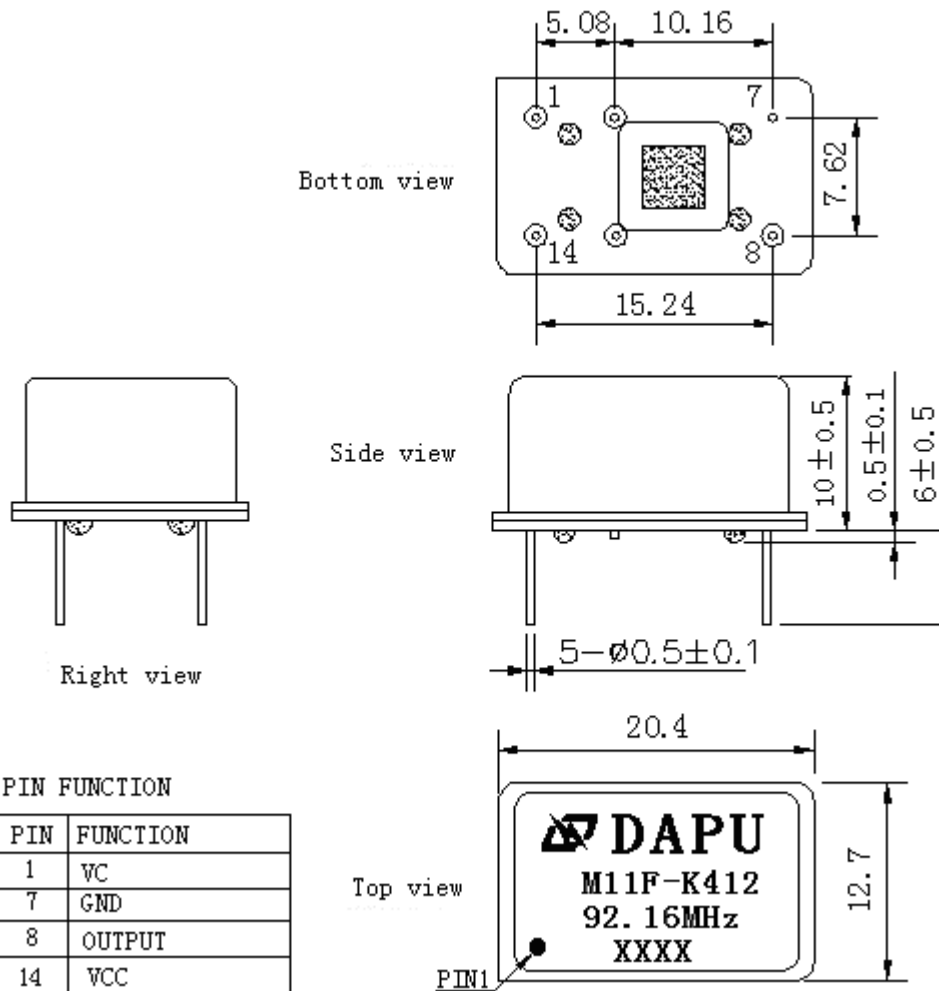
MODEL: M11F-K412-92.16MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency	92.16			MHz	
	Output Waveform	Sine Wave				
	Level	8			dBm	$V_{cc} = 3.3V, O_{load}=50\Omega.$
	Harmonics Suppression		-30		dBc	$V_{cc} = 3.3V, O_{load}=50\Omega.$
	Spurious Suppression		-70		dBc	
	Start up time			10	ms	@25°C
	Load	50			$\Omega$	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.1		+0.1	$\times 10^{-6}$	$T_A$ varied from -40°C to 85°C, measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2, V_{cc}=3.3V, V_c=1.65V,$ temperature variable speed less than 2°C per minute.
	Initial Frequency Tolerance	-0.5		+0.5	$\times 10^{-6}$	Measurement referenced to frequency observed with $T_A=25^\circ C, V_{cc}=3.3V, V_c=1.65V,$ and after 15 minutes of operation, within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-0.1		+0.1	$\times 10^{-6}$	measurement referenced to frequency observed $T_A=25^\circ C, V_{cc}$ varied from 3.13V to 3.47V, $V_c=1.65V$ and $O_{load}=50\Omega.$
	Frequency Tolerance vs. Load	-0.1		+0.1	$\times 10^{-6}$	5% load change measurement referenced to frequency observed with $T_A=25^\circ C, V_{cc}=3.3V, V_c=1.65V,$ and $O_{load}=50\Omega.$
	Aging Tolerance Per Day	-0.01		+0.01	$\times 10^{-6}$	$V_{cc}, V_c, T_A$ constant measurement referenced to frequency observed with $T_A=25^\circ C, V_{cc}=3.3V, V_c=1.65V$ and after 30 days of operation.
	Aging Tolerance Per Year	-1.0		+1.0	$\times 10^{-6}$	
Power Supply	Current Consumption		30		mA	@25°C, $V_{cc}=3.3V, O_{load}=50\Omega.$
	Supply Voltage	3.13	3.3	3.47	V	



Voltage Control Characteristics	Frequency Tuning Range			-5	$\times 10^{-6}$	$V_c=0V$ . measurement referenced to $V_c=1.65V$
		-0.5		+0.5	$\times 10^{-6}$	$V_c=1.65V$ . measurement referenced to exactly 92.16MHz
		+5			$\times 10^{-6}$	$V_c=3.3V$ . measurement referenced to $V_c=1.65V$
	Linearity			10	%	
	Slope	Positive				
	Input Impedance	100				K $\Omega$
Phase Noise	Phase Noise @25°C		-70	-65	dBc/Hz	10Hz
			-110	-103		100Hz
			-140	-136		1KHz
			-160	-157		10KHz
			-165	-162		100KHz
			-167	-164		1MHz
Environmental Conditions	Operable Temperature	-40		+85	°C	
	Storage Temperature	-55		+125	°C	
	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	Not humidity sensitive.				
	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 (°C)	-10~35°C				



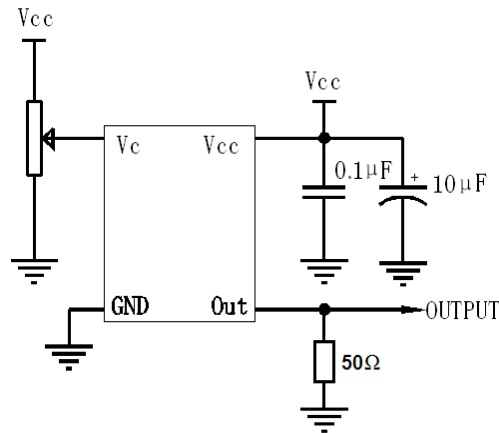
## 2. Mechanical Structure(mm)



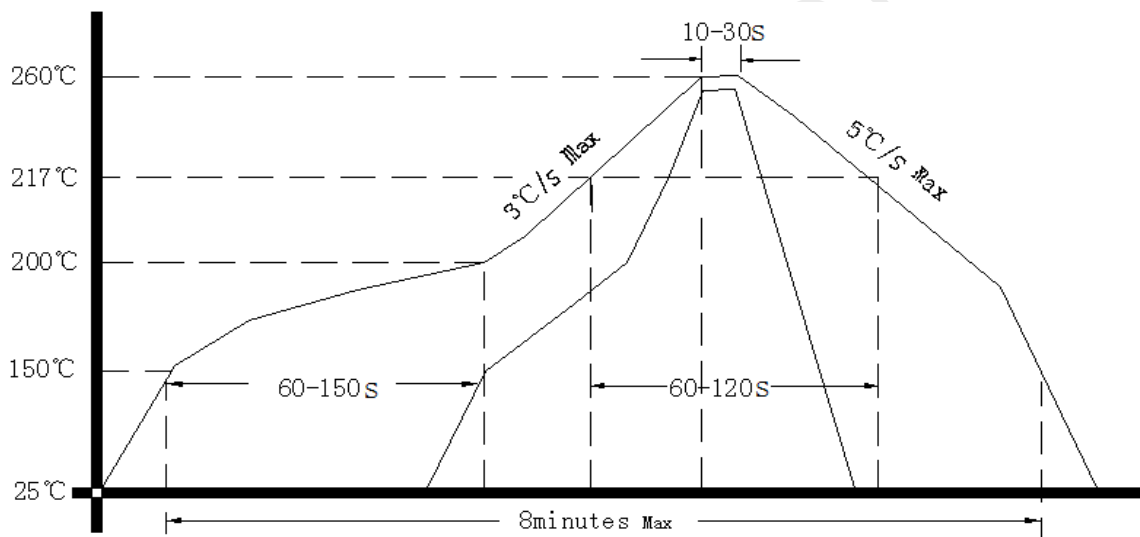
- Note1:** Tolerance  $\pm 0.20\text{mm}$  without mark
- Note2:** The first two xx representative: week  
After two xx representative: year
- Note3:** Referential weight 4.2g



### 3. Test circuit



### 4. Reflow Soldering Curve (RoHS)



### 5. Package: PVC Tube,10pcs (mm)

