

Travelling Merchant: \_\_\_\_\_

# DATASHEET

Standard:     **V11A-H315-19.44MHz**    

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

Plot			The Label
Drew	Audited	Approved	Stamp, please! Thanks!
Date: 2013.08.12			

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## 1. Electrical Parameters

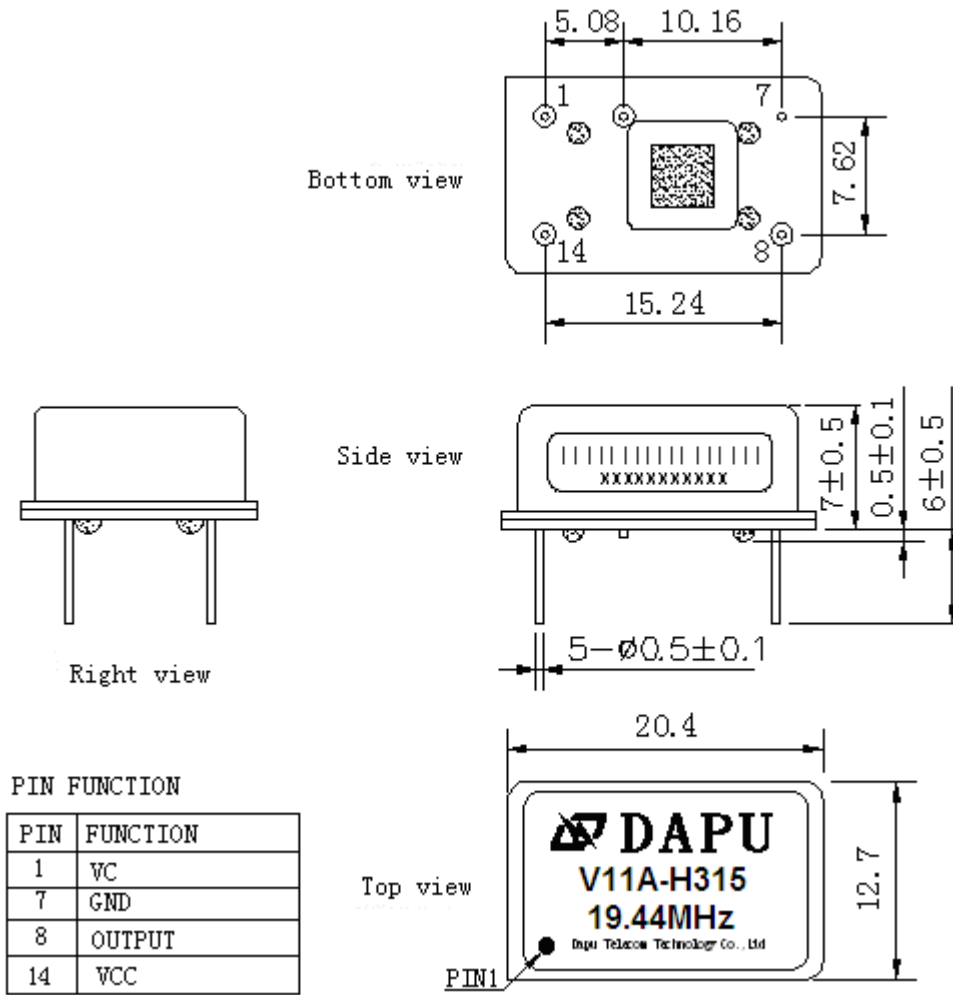
MODEL: V11A-H315-19.44MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency	19.44			MHz	
	Output Waveform	HCMOS				
	Output Low Voltage			0.4	V	$V_{cc}=3.3V, O_{load}=15pF$
	Output High Voltage	2.4			V	$V_{cc}=3.3V, O_{load}=15pF$
	Duty Cycle	45	50	55	%	@50%
	Rise / Fall Time (10%~90%)			5	ns	@25°C
	Load	15			pF	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-15		+15	$\times 10^{-6}$	$T_A$ varied from -40°C to 85°C, measurement referenced to frequency observed with $T_A=25^\circ C, V_{cc}=3.3V, V_c=1.65V, O_{load}=15pF$ , temperature variable speed less than 2°C per minute.
	Initial Frequency Tolerance	-5		+5	$\times 10^{-6}$	Measurement referenced to frequency observed with $T_A=25^\circ C, V_{cc}=3.3V, V_c=1.65V$ within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-3		+3	$\times 10^{-6}$	measurement referenced to frequency observed $T_A=25^\circ C, V_{cc}$ varied from 3.13V to 3.47V, $V_c=1.65V$ and $O_{Load}=15pF$ .
	Frequency Tolerance vs. Load	-3		+3	$\times 10^{-6}$	5% load change measurement referenced to frequency observed with $T_A=25^\circ C, V_{cc}=3.3V, V_c=1.65V, O_{Load}=15pF$ .
	Aging Tolerance 1 Year	-3		+3	$\times 10^{-6}$	$T_A=25^\circ C, V_{cc}=3.3V, V_c=1.65V$ and after 1h of operation.
Power Supply	Current Consumption			20	mA	@25°C, $V_{cc}=3.3V, V_c=1.65V, O_{load}=15pF$ .
	Supply Voltage	3.13	3.3	3.47	V	



Voltage Control Characteristics	Frequency Tuning Range			-50	$\times 10^{-6}$	$V_c=0V$ . measurement referenced to $V_c=1.65V$
		-5		+5	$\times 10^{-6}$	$V_c=1.65V$ . measurement referenced to exactly 19.44MHz
		+50			$\times 10^{-6}$	$V_c=3.3V$ . measurement referenced to $V_c=1.65V$
	Linearity			10	%	
	Slope	Positive				
	Input Impedance	100				K $\Omega$
Phase Noise	Phase Noise		-130	-125	dBc/Hz	1KHz
Environmental Conditions	Operable Temperature	-40		+85	$^{\circ}C$	
	Storage Temperature	-55		+105	$^{\circ}C$	
	ESD Level	Human Body Model, class2: 2000V to 4000V; ANSI/ESDA/JEDEC JS-001-2010.				
		Machine Model, class B: 200V to 400V; ANSI/ESDA/JEDEC JS-001-2010.				
	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.					



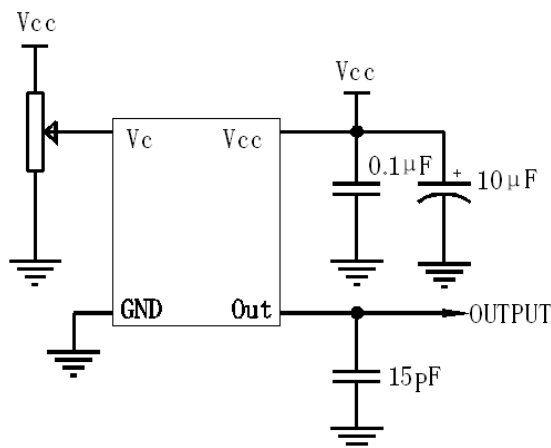
## 2. Mechanical Structure(mm)



Note1: Tolerance ±0.2mm without mark

Note2: Referential Weight 3.8g

## 3. Test circuit





#### 4. Reflow Soldering Curve (RoHS)



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

