

Travelling Merchant: _____

DATASHEET

Standard: **O22B-Q312-10.00MHz**

P/N: _____

Plot			The Label
Drew	Audited	Approved	Stamp, please! Thanks!
Date: 2012.03.14			

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

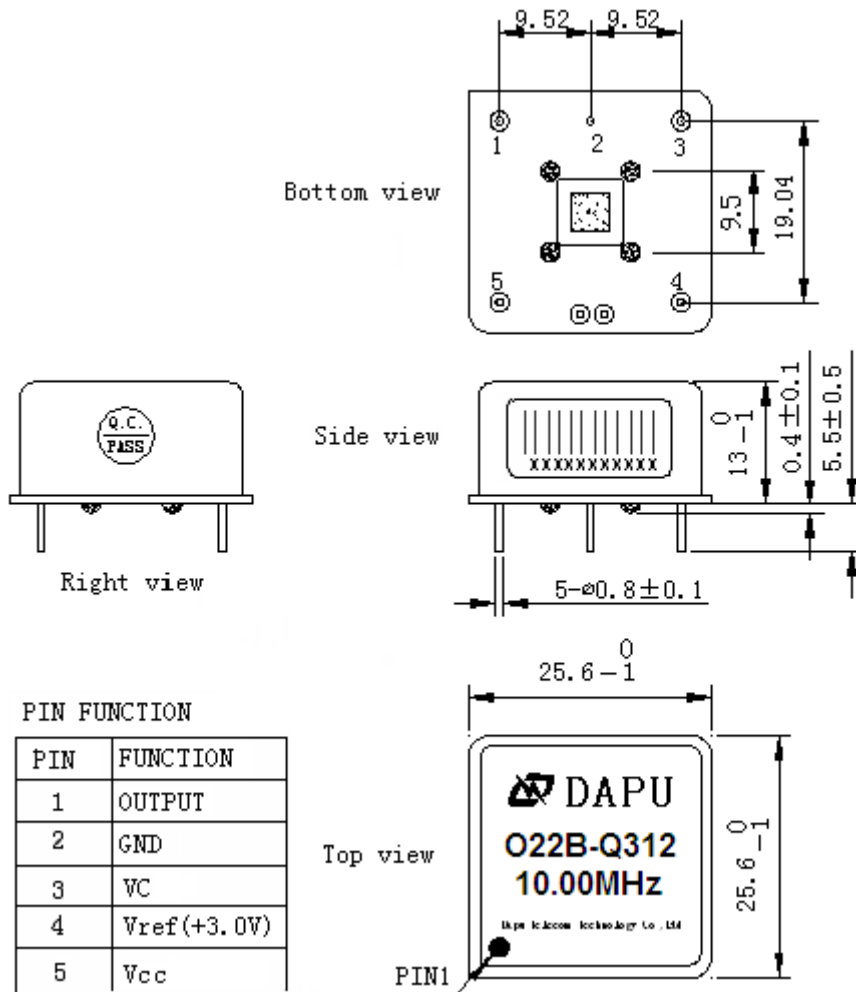
MODEL: O22B-Q312-10.00MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency	10.00			MHz	
	Output Waveform	HCMOS				
	Output Low Voltage			0.4	V	$V_{cc}=3.3V, O_{load}=15pF$
	Output High Voltage	2.4			V	$V_{cc}=3.3V, O_{load}=15pF$
	Duty Cycle	45	50	55	%	@50%
	Rise / Fall Time (10%~90%)			10	ns	
	Load	15			pF	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-5		+5	$\times 10^{-9}$	T_A varied from $-40^{\circ}C$ to $70^{\circ}C$, measurement referenced to frequency observed with $T_A = 25^{\circ}C, V_{cc}=3.3V, V_c=1.5V, O_{load}=15pF$, temperature variable speed less than $2^{\circ}C$ per minute.
	Initial Frequency Tolerance	-0.05		+0.05	$\times 10^{-6}$	Measurement referenced to frequency observed with $T_A=25^{\circ}C, V_{cc}=3.3V, V_c=1.5V$, and after 15 minutes of operation, within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-2		+2	$\times 10^{-9}$	measurement referenced to frequency observed $T_A=25^{\circ}C, V_{cc}$ varied from 3.13V to 3.47V, $V_c=1.5V$ and $O_{Load}=15pF$.
	Frequency Tolerance vs. Load	-2		+2	$\times 10^{-9}$	5% load change measurement referenced to frequency observed with $T_A=25^{\circ}C, V_{cc}=3.3V, V_c=1.5V$, and $O_{Load}=15pF$.
	Short-Term Stability: Allan Variance			0.01	$\times 10^{-9}$	Temperature stability, no EMI\EMC or other interference, test after power for 1hour ref. to $25^{\circ}C; 1s$, using PN9000 equipment.
	Aging Tolerance Per Day	-0.5		+0.5	$\times 10^{-9}$	V_{cc}, V_c, T_A constant measurement referenced to frequency observed with $T_A=25^{\circ}C, V_{cc}=3.3V, V_c=1.5V$, and after 30 days of operation.
	Aging Tolerance 1 Year	-0.05		+0.05	$\times 10^{-6}$	
Power Supply	Supply Voltage	3.13	3.3	3.47	V	
	Steady Consumption			500	mA	@ $25^{\circ}C$
	Warm up current			1400	mA	



Voltage Control Characteristics	Frequency Tuning Range	-0.8		-0.5	$\times 10^{-6}$	$V_c = 0$ V. measurement referenced to $V_c = 1.5$ V
		-0.05		+0.05	$\times 10^{-6}$	$V_c = 1.5$ V. measurement referenced to exactly 10.00 MHz
		+0.5		+0.8	$\times 10^{-6}$	$V_c = 3.0$ V. measurement referenced to $V_c = 1.5$ V
	Linearity			10	%	
	Slope	Positive				
	Input Impedance	100				K Ω
Phase Noise	Phase Noise		-120	-115	dBc/Hz	10 Hz
			-140	-135		100 Hz
			-150	-145		1 KHz
			-152	-147		10 KHz
			-155	-150		100 KHz
			-158	-153		1 MHz
Environmental Conditions	Operable Temperature	-40		+85	$^{\circ}$ C	
	Storage Temperature	-55		+105	$^{\circ}$ C	
	ESD Level	Human Body Model, class 2: 2000 V to 4000 V; ANSI/ESDA/JEDEC JS-001-2010.				
		Machine Model, class B: 200 V to 400 V; ANSI/ESDA/JEDEC JS-001-2010.				
	Moisture Sensitivity Level	Not humidity sensitive.				
	Vibration	Test Condition: 0.75 mm; acceleration: 10 g; 10 Hz ~ 500 Hz, one cycle per 30 min, test 2 hour. (3 times for each 3 directions X, Y, Z), IEC 68-2-06 Test Fc.				
Shock	50 g; 11 ms; half sine wave (3 times for each 3 directions X, Y, Z), IEC 68-2-27 Test Ea/Severity 50A.					



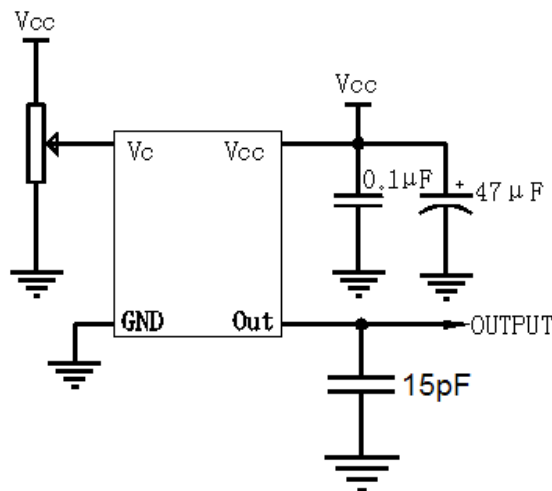
2. Mechanical Structure (mm)



Note1: Tolerance ±0.2mm without mark

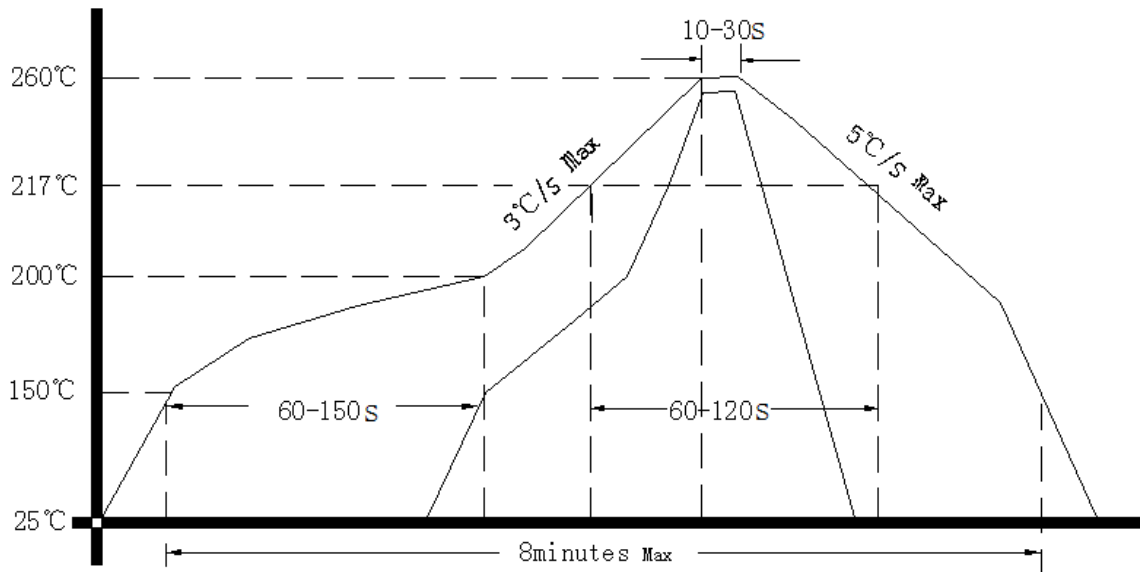
Note2: Referential Weight 18g

3. Test Circuit





4. Reflow Soldering Curve (RoHS)



5. Package (mm)

