Travelling Merchant:_____

DATASHEET

Standard: **VC756B-CCAD-2.048MHz**

P/N: _____

Plot			The Label
Drew	Audited	Approved	
Amway.wei	Tina.Tang	James.Liu	
Date: 2013.04.08			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	2006.12.12
1.1	Version upgraded	Amway	2013.04.08
1.2	“Mechanical Structure”change	Amway	2013.04.26

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1. Electrical Parameters

MODEL： VC756B-CCAD-2.048MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		2.048		MHz	
	Output Waveform		HCMOS			
	Output Low Voltage			0.33	V	V_{cc}=3.3V, O_{load}=15 pF
	Output High Voltage	2.97			V	V_{cc}=3.3V, O_{load}=15 pF
	Duty Cycle	45	50	55	%	@50%
	Rise / Fall Time （10%~90%）			6	ns	@25℃
	Load		15		pF	
	Jitter			1	ps	RMS (12kHz ~20MHz)
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-25		+25	$\times 10^{-6}$	T_A varied from-40℃ to 85℃, measurement referenced to frequency observed with T_A=25℃, V_{cc}=3.3V, V_c=1.65V, O_{load}=15pF, temperature variable speed less than 2℃per minute.
	Initial Frequency Tolerance	-15		+15	$\times 10^{-6}$	Measurement referenced to frequency observed with T_A=25℃, V_{cc}=3.3V, V_c=1.65V within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-5		+5	$\times 10^{-6}$	measurement referenced to frequency observed T_A=25℃, V_{cc} varied from3.13V 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℃, V_{cc}=3.3V, V_c=1.65V, O_{Load}=15pF.
	Aging Tolerance 1 Year	-3		+3	$\times 10^{-6}$	T_A=25℃, V_{cc}=3.3V, V_c=1.65V and after 1h of operation.
Power Supply	Current Consumption			5	mA	@25℃, V_{cc}=3.3V, V_c=1.65V, O_{load}=15pF.
	Supply Voltage	3.13	3.3	3.47	V	

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Voltage Control Characteristics	Frequency Tuning Range			-100	$\times 10^{-6}$	V_c=0V. measurement referenced to V_c=1.65V
		-15		+15	$\times 10^{-6}$	V_c=1.65V. measurement referenced to exactly 2.048MHz
		+100			$\times 10^{-6}$	V_c=3.3V. measurement referenced to V_c=1.65V
	Linearity			10	%	
	Slope	Positive				
	Input Impedance	100			KΩ	
Phase Noise	Phase Noise		-130		dBc/Hz	1KHz
Environmental Conditions	Operable Temperature	-40		+85	℃	
	Storage Temperature	-55		+105	℃	
	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	Level 2.				
	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.				

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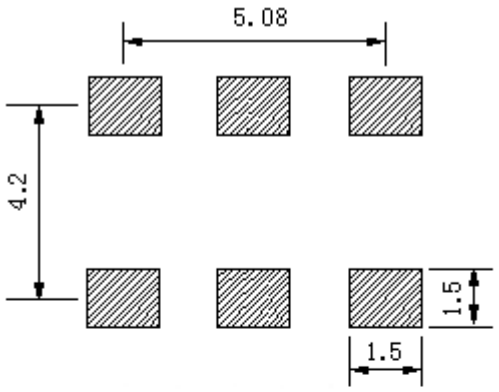
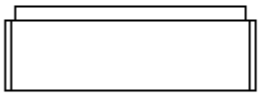
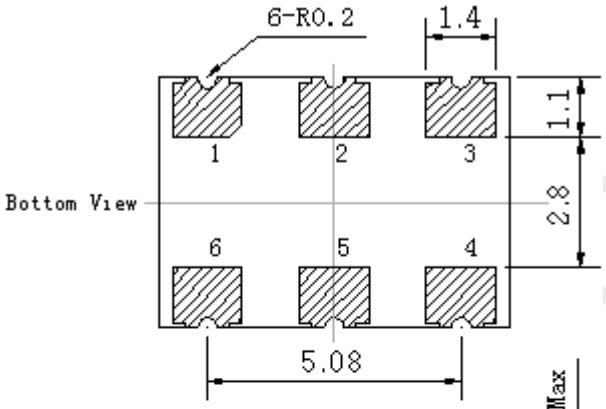
2. Mechanical Structure(mm)

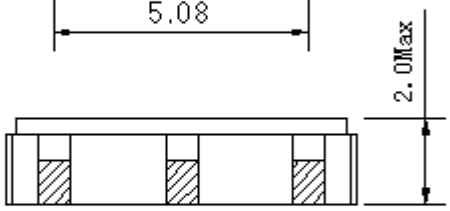


Solder pad layout



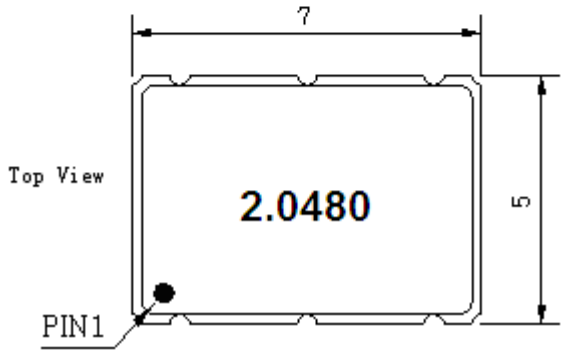
Side View





PIN FUNCTION

1	VC
2	E/D
3	GND
4	OUTPUT
5	NC
6	Vcc



Note1: Tolerance ±0.1mm without mark

Note2: Referential Weight 0.3g

Note3: Disable：Vil≤0.3V_{CC}

Enable：Vih≥0.7V_{CC}

E/D	OUT1	OUT2
high level, open	data	data
low level	no data	no data

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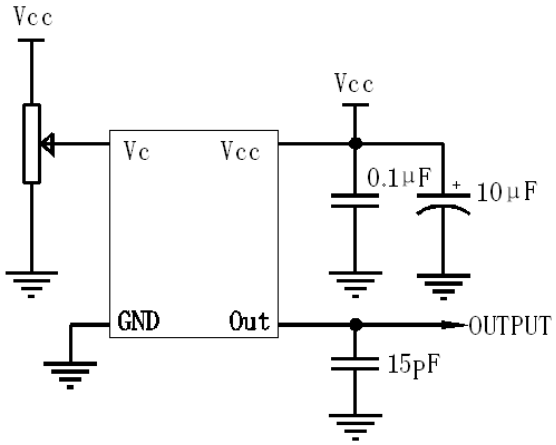
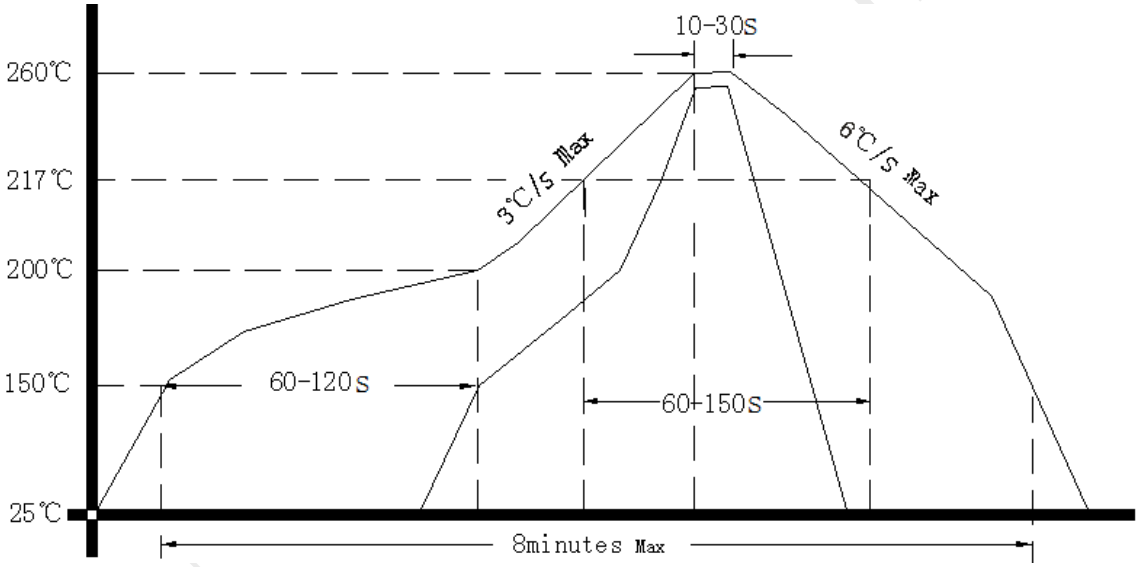
3. Test circuit



4. Reflow Soldering Curve (RoHS)



5. Package: Tape & Reel (mm)