Travelling Merchant: A016

DATASHEET

Standard: **VC936B-CEAD-125.00MHz**

Plot			The Label
Drew	Audited	Approved	Stamp, please! Thanks!
Amway.wei	Tina.Tang	James.Liu	
Date:			

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

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1. Electrical Parameters

MODEL：VC936B-CEAD-125.00MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency		125.00		MHz	
	Output Waveform		LVPECL			
	Output Low Voltage			1.8	V	@25℃,V_{cc}=3.3V(see the following chart 3)
	Output High Voltage	2.2			V	@25℃,V_{cc}=3.3V(see the following chart 3)
	Duty Cycle	45	50	55	%	@50%, measurement at V_c=1.65V
	Rise / Fall Time (20%~80%)			1	ns	@25℃
	Load		50		Ω	Connect to V_{cc}-2.0V
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-30		+30	ppm	T_A varied from -40℃ to85℃, measurement referenced to frequency observed with T_A= 25℃, V_{cc}=3.3V, V_c=1.65V, O_{load}=50Ω Connect to V_{cc}-2.0V.
	Initial Frequency Tolerance	-15		+15	ppm	Measurement referenced to frequency observed with T_A=25℃, V_{cc}=3.3V, V_c=1.65 V and after 5s of operation, within 30 days after ex-works.
	Frequency Tolerance vs. Supply Voltage	-3		+3	ppm	measurement referenced to frequency observed T_A=25℃, V_{cc} varied from 3.13V to 3.47V, V_c=1.65V and O_{Load}=50Ω Connect to V_{cc}-2.0V.
	Frequency Tolerance vs. Load	-1		+1	ppm	10% load change measurement referenced to frequency observed with T_A=25℃, V_{cc}=3.3V, V_c=1.65V and O_{Load}=50Ω Connect to V_{cc}-2.0V.
	Aging Tolerance 1 Year	-5		+5	ppm	V_{cc}, V_c, T_A constant measurement referenced to frequency observed with T_A=25℃, V_{cc}= 3.3V, V_c=1.65V and after 30 days of operation.
Power Supply	Current Consumption		80		mA	@25℃, V_{cc}=3.3V， V_c=1.65V， O_{Load}=50Ω Connect to V_{cc}-2.0V
	Supply Voltage	3.13	3.3	3.47	V	

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Voltage Control Characteristics	Frequency Tuning Range			-80	ppm	V_c= 0V. measurement referenced to V_c=1.65V
		-15		+15	ppm	V_c=1.65V. measurement referenced to exactly 125.00MHz
		+80			ppm	V_c=3.3V. measurement referenced to V_c=1.65V
	Linearity			15	%	
	Slope	Positive				
	Input Impedance	100			K Ω	
Phase Noise	Phase Noise		-70		dBc/Hz	10Hz
			-90			100Hz
			-120			1KHz
			-130			10KHz
			-140			100KHz
Environmental Conditions	Operable Temperature	-40		+85	℃	
	Storage Temperature	-55		+125	℃	
	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.				
	Drop	Test Condition: free drop on steel-made surface or rigid plane from a height of 100cm,IEC 68-2-32.				

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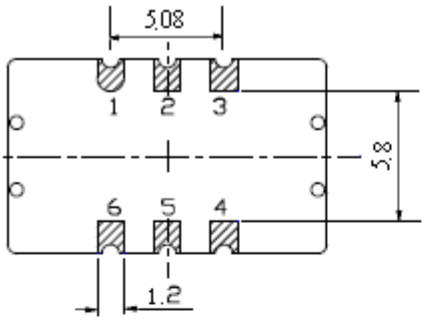
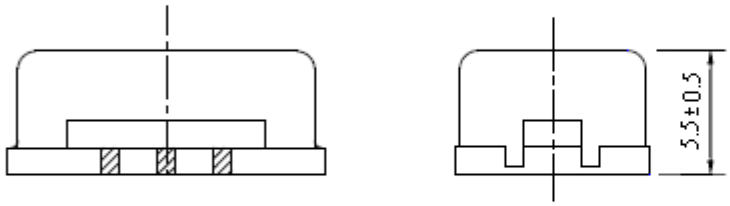
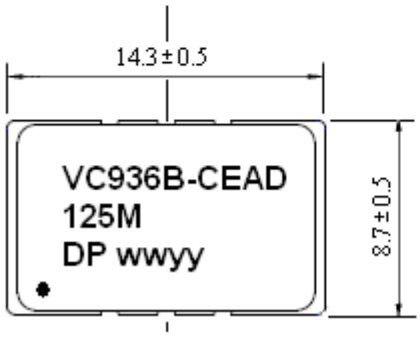
2. Mechanical Structure(mm)



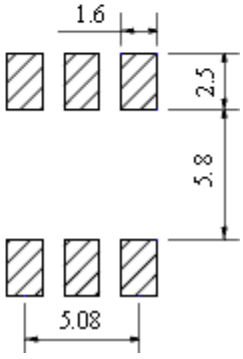




PIN FUNCTION

1	VOLTAGE CONTROL
2	E/D
3	GND
4	OUTPUT
5	$\overline{\text{OUTPUT}}$
6	Vcc

Recommended Soldering Pattern



Note1: Play inversion between kikuchi map instructions:

1.The first two ww representative: week

2.After two yy representative: year

Note2: Referential Weight 1.4g

Note3： Enable：Vil≤Vcc-2.0V

Disable：Vih≥Vcc-1.025V

E/D	OUT1	OUT2
Low Level, Open	Data	Data
High Level	Logic low	Logic high

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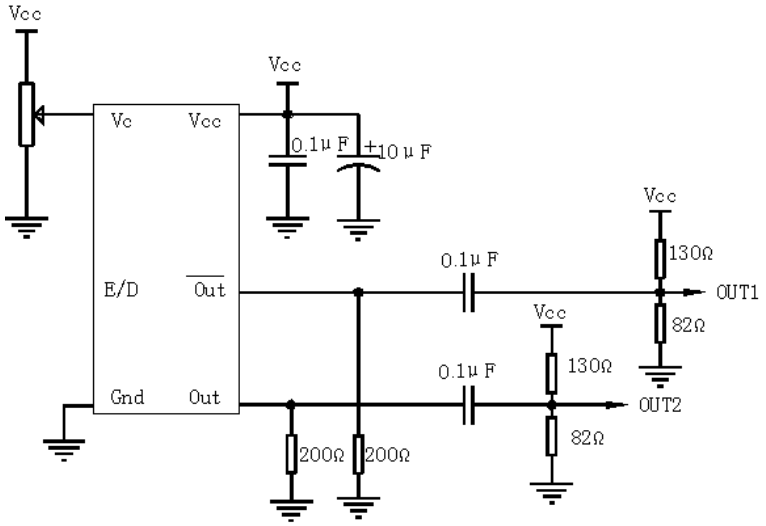
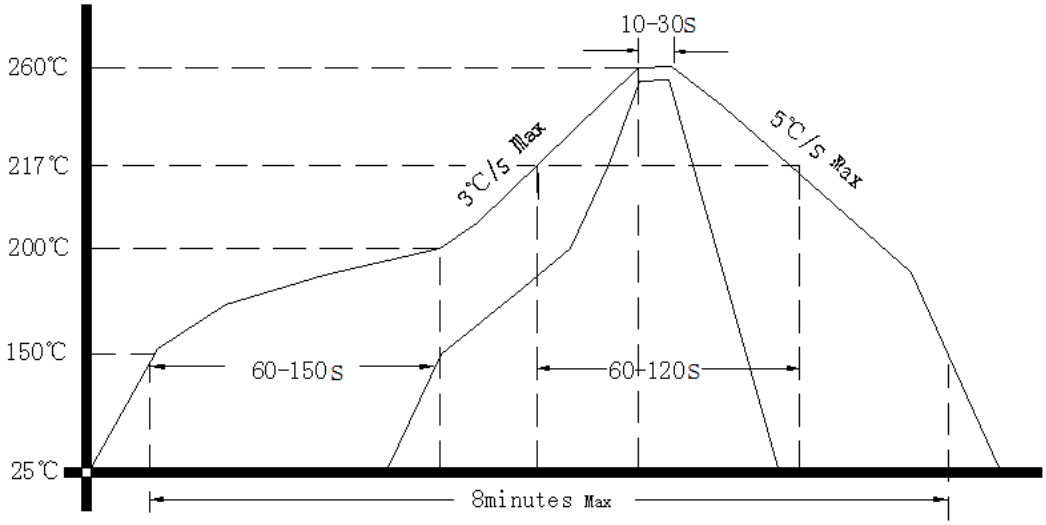
3. Test Circuit



4. Reflow Soldering Curve (RoHS)



5. Package: Tape & Reel (mm)