Travelling Merchant:_____

DATASHEET

Standard: **CM55F-X129-10.00MHz**

P/N: _____

Plot			The Label
Drew	Audited	Approved	
Amway.wei	Steven.Sun	James.Liu	
Date: 2013.10.28			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	2013.10.28

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1、Electrical Parameters

1 PPS Reference Input	Parameters	Min.	Typ.	Max.	Unit.	Test Condition
	Waveform	HCMOS				
	High-Level Output Voltage (V_{IH})	2.7			Vdc	50 Ohms
	Low-Level Output Voltage (V_{IL})			0.4	Vdc	
	Pulse Width	10			uSec	
	Connector	Pin 10				
State Input	Parameters	Min.	Typ.	Max.	Unit.	
	Lock Enable	2.7			Vdc	<5mA Load
	Lock Disable			0.4	Vdc	<5mA Load
	Connector	Pin 8				
RF Output	Parameters	Min.	Typ.	Max.	Unit.	Test Condition
	Nominal Frequency		10		MHz	
	Waveform	HCMOS				
	High-level Output voltage (V_{OH})	2.7			Vdc	<5mA Load
	Low-level Output voltage (V_{OL})			0.4	Vdc	<5mA Load
	Rise/Fall Time			8	nSec	<5mA Load
	Duty Cycle	45	50	55	%	<5mA Load
	Accuracy	-1		1	E-12	24 hour average when locked to 1 PPS
	Short-term stability			2	E-11	Temperature stability,no EMI\EMC or other interference,test after power for 1 hour ref. to 25℃; 1s, using PN9000 equipment.
	Phase noise (All conditions)		-118		dBc/Hz	@ 10Hz offset
			-138		dBc/Hz	@ 100Hz offset
			-148		dBc/Hz	@ 1KHz offset
			-150		dBc/Hz	@ 10KHz offset
			-150		dBc/Hz	@ 100KHz offset
			-150		dBc/Hz	@ 1MHz offset
	Connector	Pin 14				
Holdover Capability	Holdover Time	Min.	Typ.	Max.	Unit.	
	24 hours	-8		8	uSec	ΔT=±2℃, 24 hours holdover after turn on 7days

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Supply Voltage	Parameters	Min.	Typ.	Max.	Unit.	
	Supply voltage	4.75	5.0	5.25	Vdc	
	Current consumption			1400	mA	During Warm-up
				600	mA	During steady state operation @25℃
	AC ripple			50	mVpk-pk	10Hz to 1MHz
	Connector	Pin 3				
1 PPS Output Waveform Characteristics	Parameters	Min.	Typ.	Max.	Unit.	
	Waveform	HCMOS				
	High-Level Output Voltage(V_{OH})	2.7			Vdc	50 Ohms
	Low-level Output voltage (V_{OL})			0.4	Vdc	
	Pulse width	10			uSec	
	Connector	Pin 12				
State Output	Parameters	Min.	Typ.	Max.	Unit.	
	Lock	2.7			Vdc	<5mA Load
	Holdover			0.4	Vdc	<5mA Load
	Connector	Pin 5				
Environmental Conditions	Parameter	Conditions				
	Operating temperature	-20℃ to +75℃				
	Storage Temperature	-55℃ to +105℃				
	Storage humidity	30%~80%				
	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～500Hz, one cycle per 30 min, test 2 hours. (3 times for each 3 directions X ,Y , Z)， IEC 68-2-06 Test Fc.				
	Shock	50g；11ms；half sine wave (3 times for each 3 directions X ,Y, Z),IEC 68-2-27 Test Ea/Severity 50A.				

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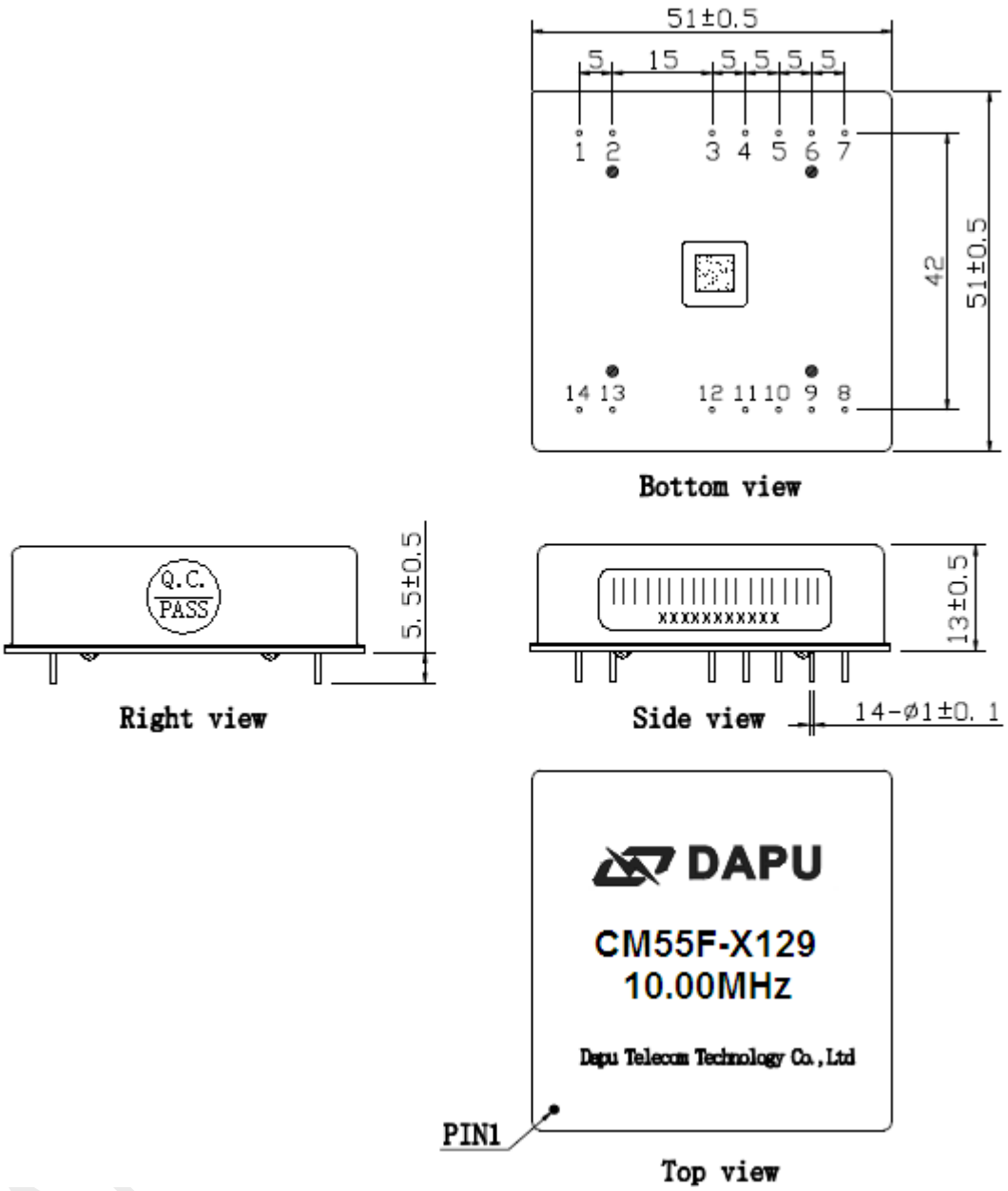
2、Mechanical Structure(mm)



Note1: Tolerance ±0.2mm without mark

Note2: Referential Weight 52±5g

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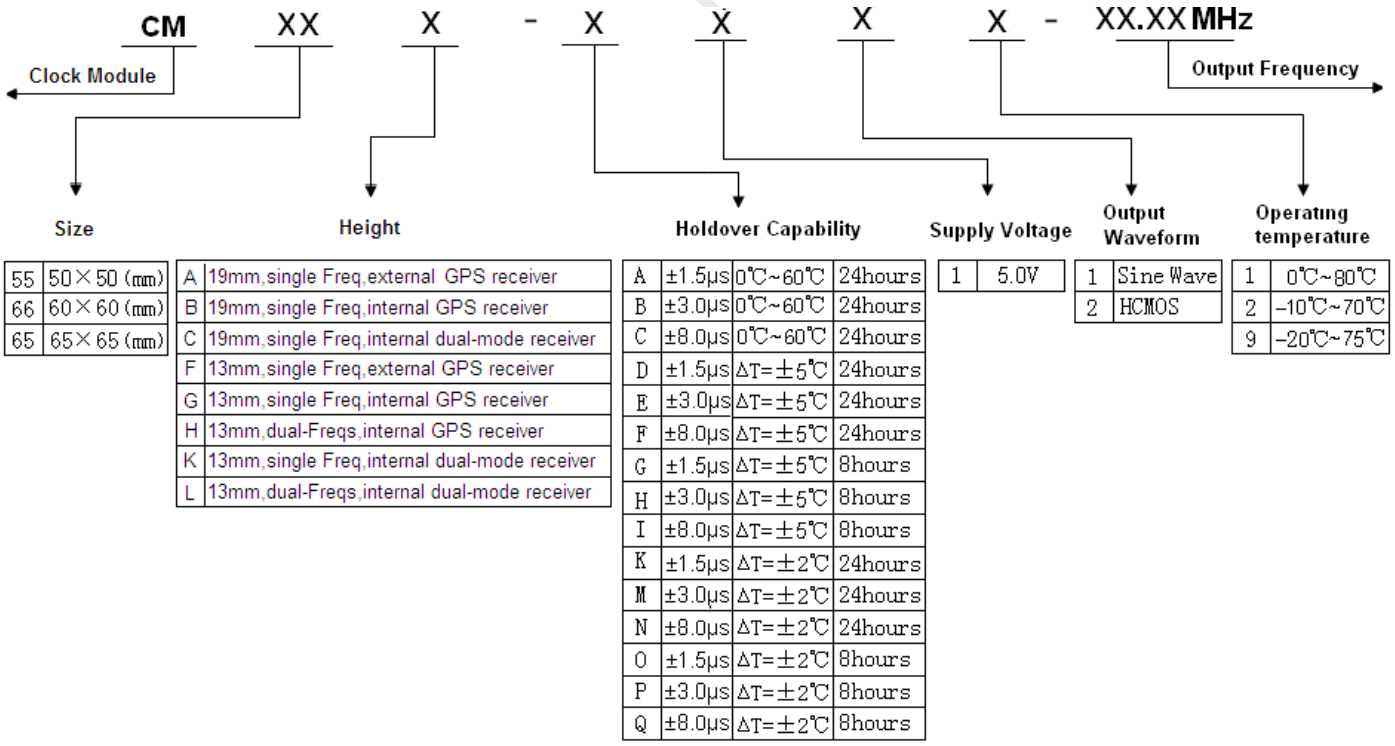
PIN DEFINITION			
PIN	**Name**		**DESCRIPTION**
1	NMEA-IN		NMEA format data input.9600-N-8-1.
2	NMEA-OUT		NMEA format data output.9600-N-8-1.
3	Vcc +5.0Vdc		Power supply input,4.75V to 5.25V.
5	Lock OUTPUT		State output. Output high level when the work state is Run2(See section 4),others low level.
6	RX INPUT		Asynchronous serial data input. 9600-N-8-1.
7	TX OUTPUT		Asynchronous serial data output. 9600-N-8-1.
8	State INPUT	H: Lock	The work state is set to normal operation when the state input is high.
		L: Unlock	The work state is set to hold over when the state input is low.
9	NC		Not connected.
10	PP1S INPUT		PP1S reference input.
12	PP1S OUTPUT		The clock module PP1S output.
14	10MHz OUTPUT		10MHz OCXO frequency output.
4、11、13	GND		GND

3、Coding Rules



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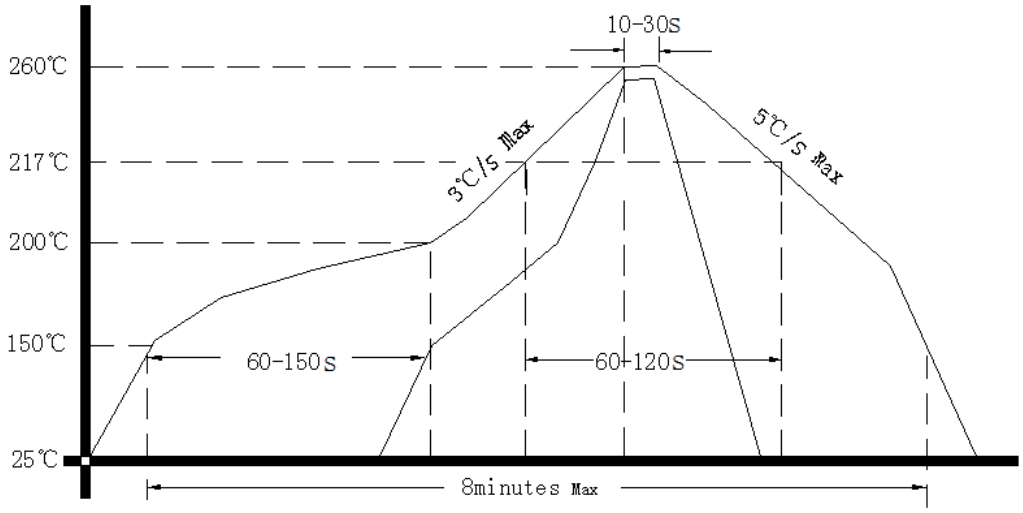
4、Reflow Soldering Curve (RoHS)



5、Package（mm）