Customer Code : _____

DATASHEET

DAPU P/N: **CM55F-X129-10.00MHz-A**

Customer P/N: _____

DAPU			Customer Approval
Drew	Audited	Approved	
Amway.wei	Steven.Sun	James.Liu	
Date: 2015.08.24			Stamp, please! Thanks!

Guangdong Dapu Telecom Technology Co.,Ltd

Bldg 16,.N.Ind.Zone,SSL Industry Park, Dongguan City, Guangdong Province, China

TEL：0086-0769-88010888 FAX：0086-0769-81800098

Bldg 16,.N.Ind.Zone,SSL Industry Park,
Dongguan City, Guangdong Province,
PRC China
TEL:0086-0769-88010888
FAX:0086-0769-81800098

Table of amendment

Version	Revision contents	Prepared by	Revised date
1.0	The first issued	Amway	2015.08.24

Bldg 16,.N.Ind.Zone,SSL Industry Park,
Dongguan City, Guangdong Province,
PRC China
TEL:0086-0769-88010888
FAX:0086-0769-81800098

1、Electrical Parameters

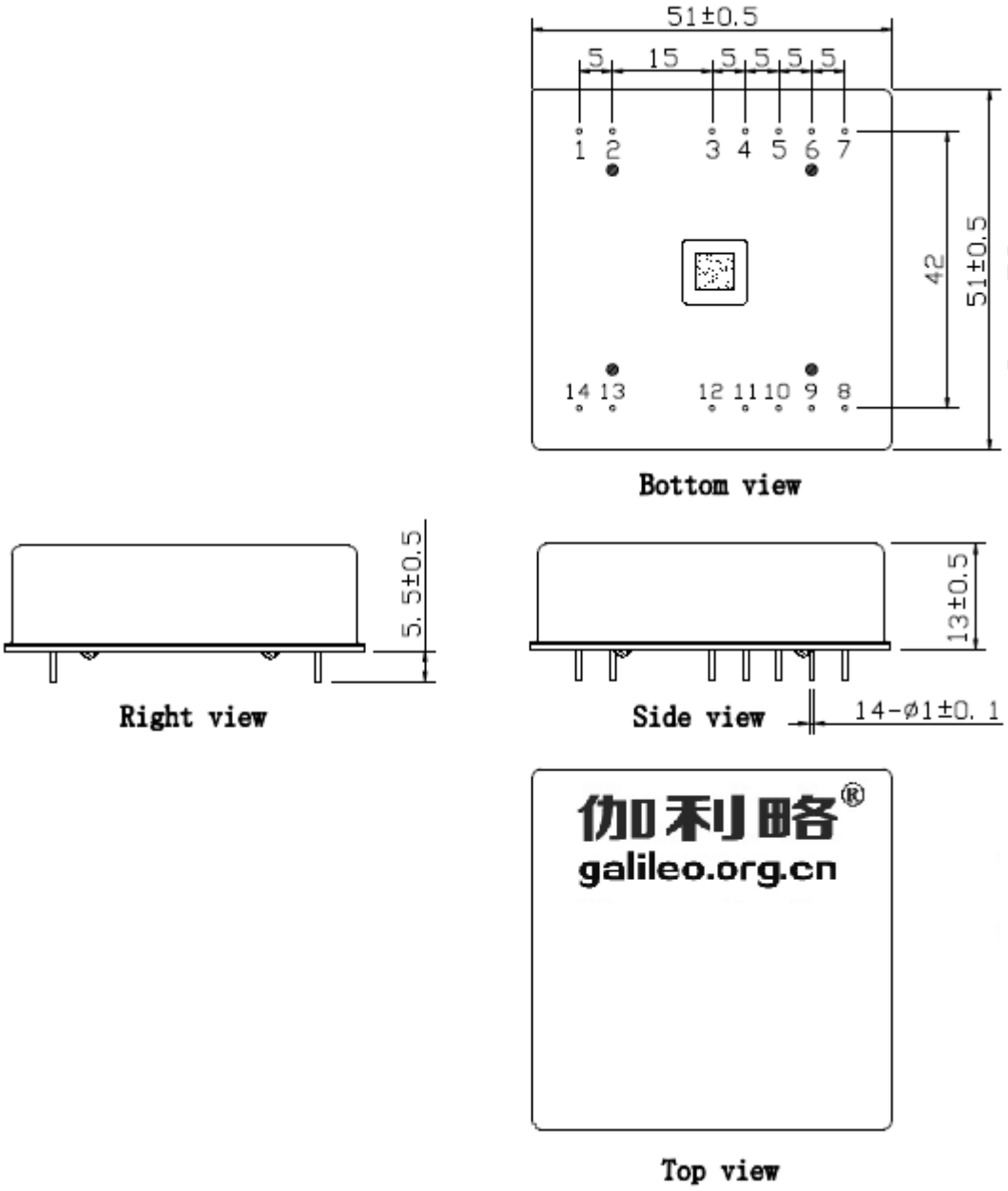
1 PPS Reference Input	Parameters	Min.	Typ.	Max.	Unit.	Test Condition
	Waveform	HCMOS				
	High-Level Output Voltage (V_{IH})	2.7			Vdc	50 Ohms
	Low-Level Output Voltage (V_{IL})			0.4	Vdc	
	Pulse Width	10			uSec	
	Connector	Pin 10				
State Input	Parameters	Min.	Typ.	Max.	Unit.	
	Lock Enable	2.7			Vdc	<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

Bldg 16,.N.Ind.Zone,SSL Industry Park,
Dongguan City, Guangdong Province,
PRC China
TEL:0086-0769-88010888
FAX:0086-0769-81800098

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.				
Full Package Storage	Relative humidity (%)	20%～70%				
	Temperature (℃)	-10~35℃				

Bldg 16,.N.Ind.Zone,SSL Industry Park,
Dongguan City, Guangdong Province,
PRC China
TEL:0086-0769-88010888
FAX:0086-0769-81800098

2、Mechanical Structure(mm)



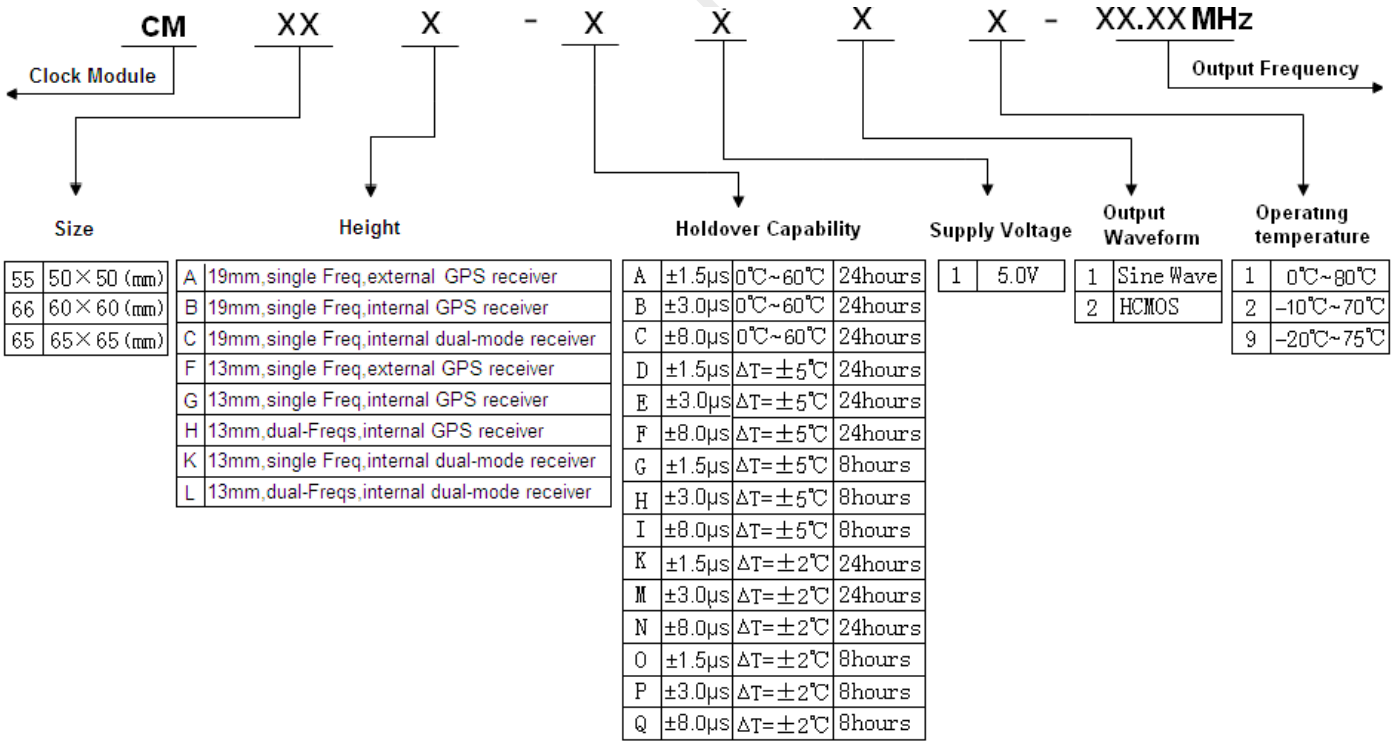
Note1: Tolerance ±0.20mm without mark

Note2: Referential Weight 52±5g

Bldg 16,.N.Ind.Zone,SSL Industry Park,
Dongguan City, Guangdong Province,
PRC China
TEL:0086-0769-88010888
FAX:0086-0769-81800098

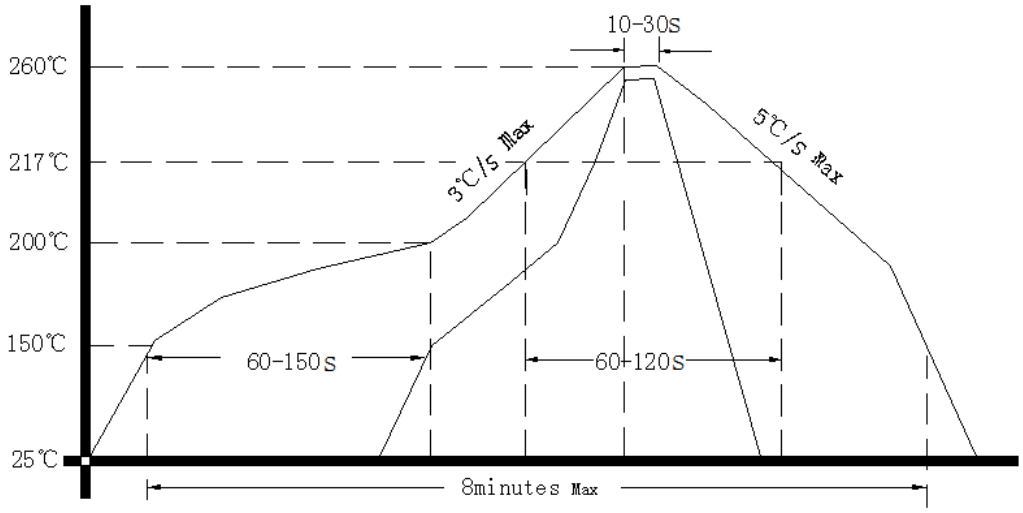
PIN DEFINITION			
PIN	**Name**		**DESCRIPTION**
1	NMEA-IN		NMEA format data input.9600-N-8-1.
2	NMEA-OUT		NMEA format data output.9600-N-8-1.
3	Vcc +5.0Vdc		Power supply input,4.75V to 5.25V.
5	Lock OUTPUT		State output. Output high level when the work state is Run2(See section 4),others low level.
6	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



Bldg 16,.N.Ind.Zone,SSL Industry Park,
Dongguan City, Guangdong Province,
PRC China
TEL:0086-0769-88010888
FAX:0086-0769-81800098

4、Reflow Soldering Curve (RoHS)



5、Package（mm）