Customer Code:

DATASHEET

DAPU P/N: **CM55F-E129-19.20MHz**

Customer P/N:

DAPU			Customer Approval
Drew	Audited	Approved	
Amway.wei	Tony · Wang	James.Liu	
Date: 2020.03.18			Stamp, please! Thanks!

Guangdong Dapu Telecom Technology Co.,Ltd

Bldg16,.N.Ind.Zone,SSL Industry Park, GuangDong City, Guangdong Province, China

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

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Table of amendment

Version	Revision contents	Prepared by	Revised date
1.0	The first issued	Amway	2020.03.18

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1. Electrical Parameters

1 PPS Reference Input	Parameters	Min.	Typ.	Max.	Unit.	Test Condition
	Waveform	HCMOS				
	High-Level Input Voltage (V_{IH})	2.7			V	50Ω
	Low-Level Input Voltage (V_{IL})			0.4	V	
	Pulse Width	10			μs	
	Connector	Pin 10				
State Input	Parameters	Min.	Typ.	Max.	Unit.	Test Condition
	Lock	2.7			V	<5mA Load
	Holdover			0.4	V	<5mA Load
	Connector	Pin 8				
RF Output	Parameters	Min.	Typ.	Max.	Unit.	Test Condition
	Nominal Frequency	19.20			MHz	
	Waveform	HCMOS				
	High-level Output Voltage (V_{OH})	2.7			V	< 5mA Load
	Low-level Output Voltage (V_{OL})			0.4	V	< 5mA Load
	Rise/Fall Time			5	ns	< 5mA Load
	Duty Cycle	45	50	55	%	< 5mA Load
	Short-term Stability	-5		+5	$\times 10^{-12}$	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)			-90	dBc/Hz	1Hz
				-120		10Hz
				-140		100Hz
				-150		1KHz
				-150		10KHz
				-150		100KHz
	Connector	Pin 14				
Holdover Capability	Holdover Time	Min.	Typ.	Max.	Unit.	Test Condition
	24 Hours	-15		+15	μs	8 hours holdover after track 1 day
Supply Voltage	Parameters	Min.	Typ.	Max.	Unit.	Test Condition

	Supply Voltage	4.75	5.0	5.25	V	
	Current Consumption			800	mA	During Warm-up
				500	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.	Test Condition
	Waveform	HCMOS				
	High-Level Output Voltage(V_{OH})	2.7			V	50Ω
	Low-level Output voltage (V_{OL})			0.4	V	
	Pulse Width		100		ms	
	Connector	Pin 12				
Lock State	Parameters	Min.	Typ.	Max.	Unit.	Test Condition
	Lock	2.7			V	<5mA Load
	Holdover			0.4	V	<5mA Load
	Connector	Pin 1				
Track State	Parameters	Min.	Typ.	Max.	Unit.	Test Condition
	Track	2.7			V	<5mA Load
	Not Track			0.4	V	<5mA Load
	Connector	Pin 2				
Serial Interfaces	Parameters	Min.	Typ.	Max.	Unit.	Test Condition
	Rx high-level Input Voltage (VH)	2.7			V	
	Rx low-level Input Voltage (VL)			0.4	V	
	Tx high-level Output Voltage (VH)	2.7			V	
	Tx low-level Output Voltage (VL)			0.4	V	
	Connector	Pin6 and Pin7				
Environmental Conditions	Parameter	Conditions				
	Operating Temperature	-20℃ to 70℃				
	Storage Temperature	-55℃ to 100℃				
	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				

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		hour. (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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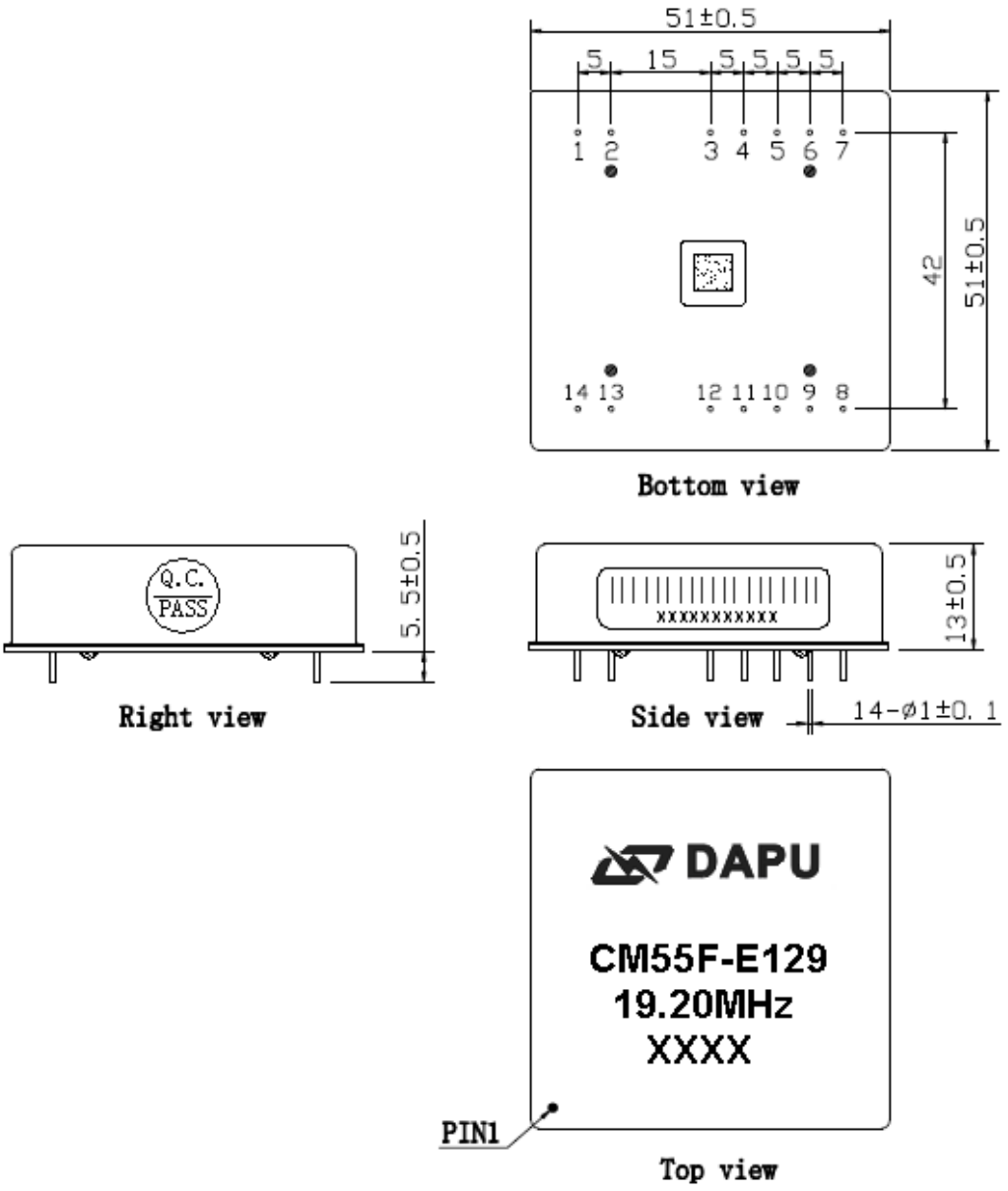
2. Mechanical Structure(mm)



Note1: Tolerance ±0.2mm without mark

Note2: Referential weight 52±5g

Note3: The first two xx representative: week
After two xx representative: year

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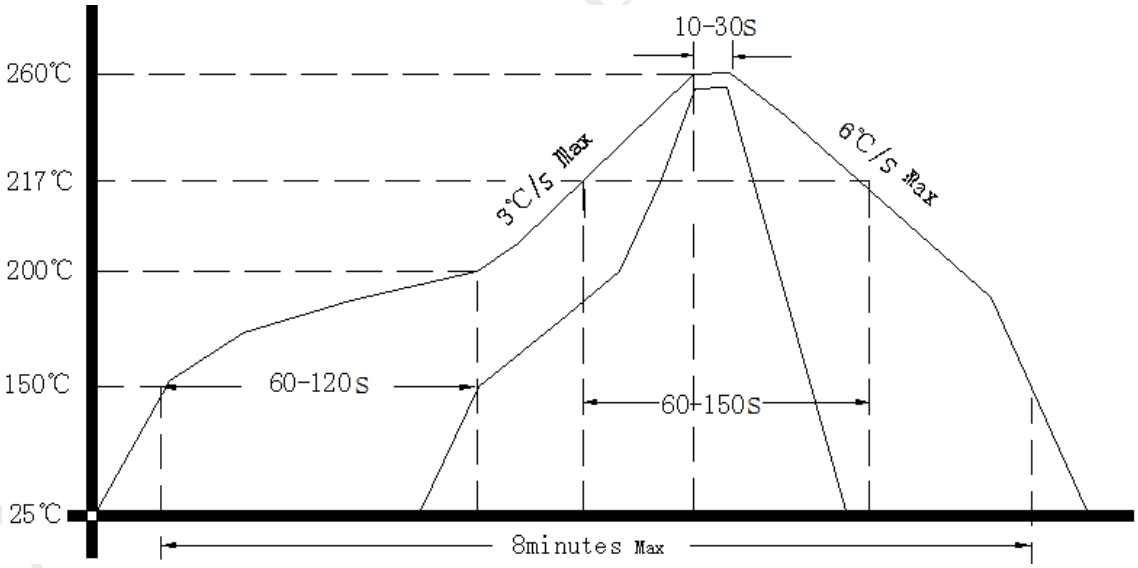
PIN DEFINITION			
PIN	**NAME**		**DESCRIPTION**
1	Lock State		Output high level when the CM is locked and the frequency accuracy ≤1ppb, others low level
2	Track State		Output high level after 3mins warm-up and 1min track, or when the PIN1 is high level, others low level
3	VCC		Power supply input, 4.75V to 5.25V
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 Enable	The work state is set to normal operation when the state input is high
		L: Lock Disable	The CM cannot be locked when the state input is low level
10	1PPS INPUT		1PPS reference input
12	1PPS OUTPUT		The clock module 1PPS output
14	19.20MHz OUTPUT		19.20MHz OCXO frequency output
5、9	NC		Not connected
4、11、13	GND		GND

3. Wave Soldering Curve (RoHS)



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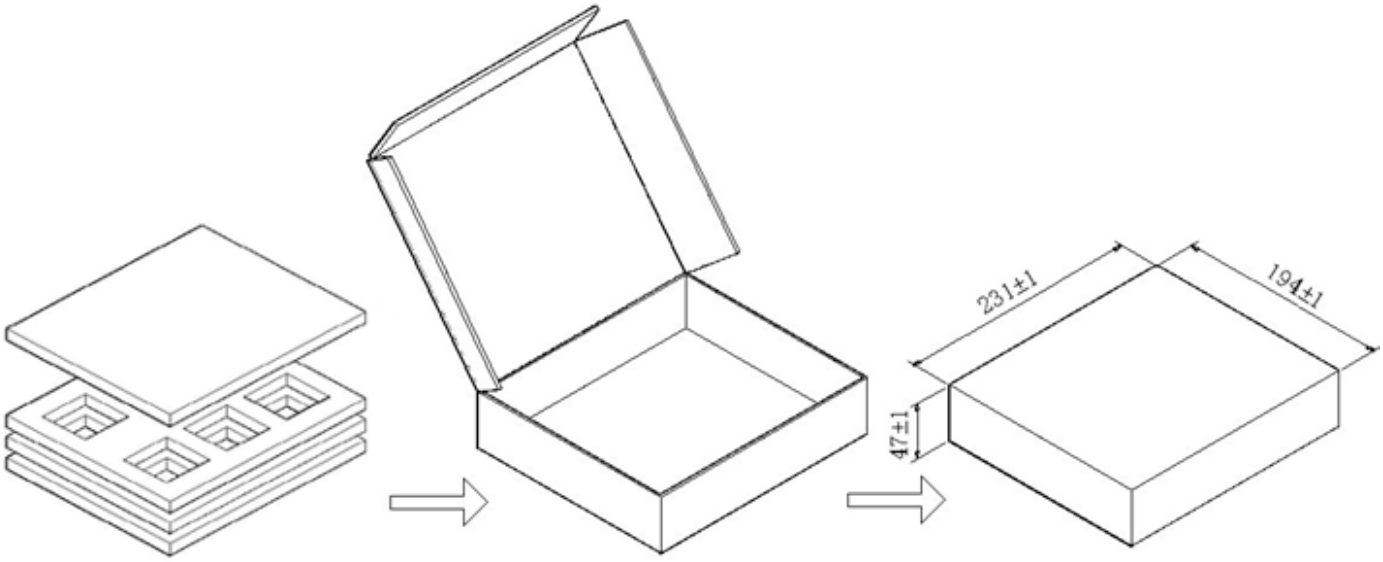
4. Package（mm）



Buffer material

Cardboard
Max 6pcs. circulator