



ZHEJIANG A-CRYSTAL

ELECTRONIC TECHNOLOGY CO., LTD.



Issue	February 13, 2025
Rev.	1.0
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CRYSTAL UNIT SPECIFICATIONS

客户批准 Customer Approval

(请批准后回签一份 Please Return A Copy With Approval)

Customer	
Customer P/N	
Product	SMD 2020 OCXO
Spec	POC2020/5.0M~120.000M
A-Crystal P/N	AG4 Series

Drawn	Checked	Approved
<i>Caoqiaobang</i>	<i>Fengying</i>	<i>Tanglong</i>



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Review Record

Rev.	Rev. Date	Item	Content	Remark
1.0	2025-02-10		Initial released	



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1. ELECTRICAL SPECIFICATIONS

1.1 FEATURE

- ① Dimension 20.6 x 20.6 x 11mm, pypical
- ② SC Cut Crystal.

1.2 TYPICAL APPLICATION

- ① SDH/SONET, Telecommunication base station
- ② Test and measurement equipment
- ③ Synthesizer, Digital switch, Reference Timing Circuit

1.3 Hold Type: POC2020

No.	Item	Electrical Specification				Remark
		Min.	Type	Max.	Units	
1	Nominal Frequency	10.00		100.00	MHz	
2	Waveform		Rectangular			Sine wave output is not available. Consult factory for more information
3	Level		HCMOS			
4	"1" Level	3.5			V	
5	"0" Level			+0.5		
6	Load		15		PF	
7	Duty cycle	45	50	55	%	@+2.0V
8	Spurious			-60	dBc	
9	Frequency Stability Ambient	-10		+10	ppb	-30°C to +70°C, referenced to +25°C Refer to Freq. Stability Vs Temp. Range table.
10	Aging	-0.5		+0.5	ppb	Per day, at time of shipment
11	Daily	-0.5		+0.5	ppb	
12	Yearly	-50		+50	ppb	
13	10 Yearly	-0.3		+0.3	ppm	



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No.	Item		Electrical Specification				Remark
			Min.	Type	Max.	Units	
14	Voltage		-0.5		+0.5	ppb	±5% Change
15	Warm-up		-50		+50	ppb	In 3 minutes @ +25°C, referenced to 1 hour
16	Phase Noise	@10Hz			-115	dBc/Hz	
		@100Hz			-135	dBc/Hz	
		@1KHz			-145	dBc/Hz	
		@10KHz			-150	dBc/Hz	
Electrical Frequency Adjustment							
17	Range				-0.5	ppm	VCO @ 0 V
			0.5				VCO @ +4.0 V
18	Control Voltage			2	4	V	
19	Slope			Positive			
20	Input impedance		100			K Ω	
21	Input Power Voltage		+4.75	+5.0	+5.25	V	3.3V input voltage is available. Consult factory for control voltage and output level.
22	Current		-10		500	mA	@ turn on
23	Steady state				1.0	W	@+25°C
24	Reference Voltage		+3.8	+4.0	+4.2	V	
25	Load		9			K Ω	
26	Package type		20.6*20.6*11				

Note: not all combination of options are available. Other specifications may be available upon request

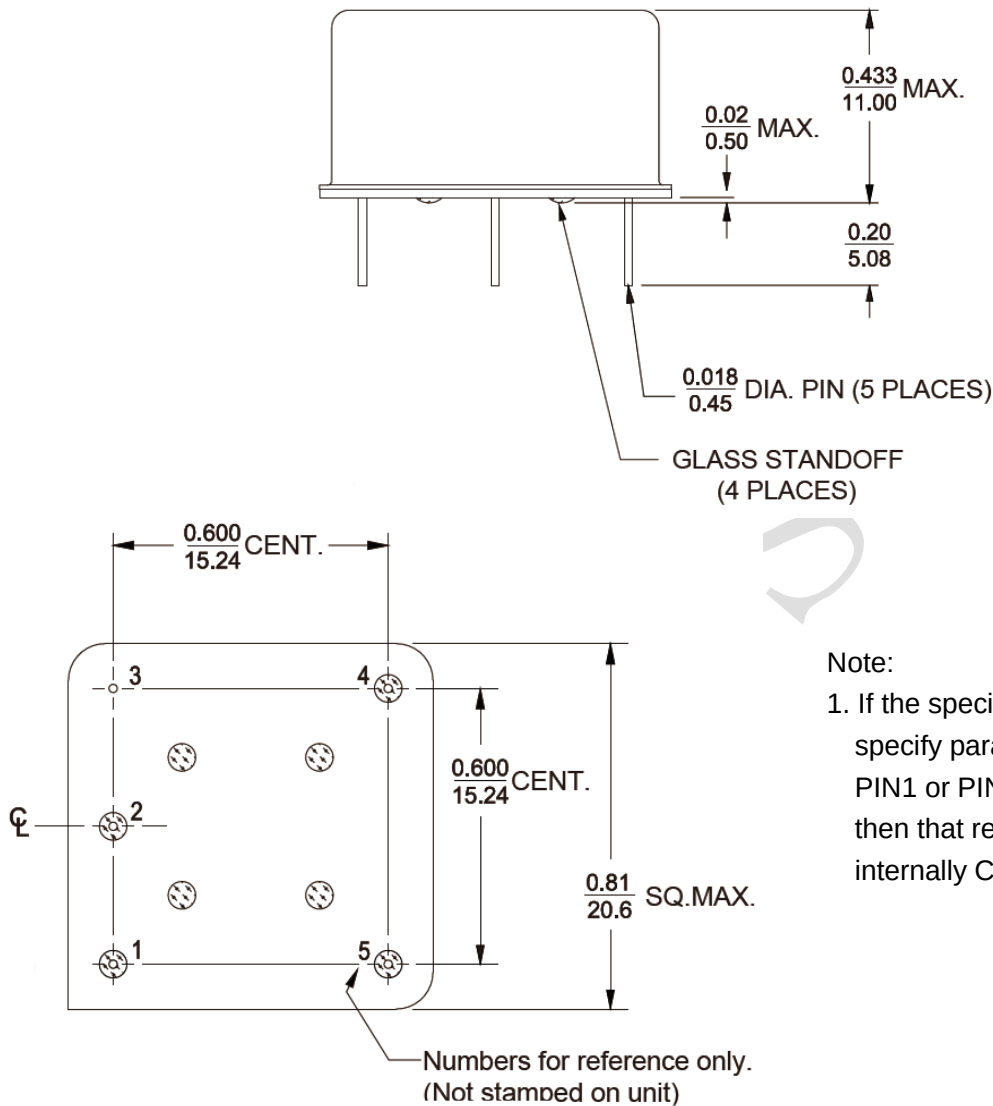


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2. PRODUCT SIZE

2.1 Dimension (Unit: mm)



Pin No.	Function
1	+VDC
2	R.F.OUTPUT
3	0 VOLTS & CASE
4	VCO INPUT or NOT CONNECTED or R.F.ENABLE
5	REFERENCE VOLTAGE or NOT CONNECTED or OVEN MONITOR

Pin No.	Function
1	VCO INPUT or NOT CONNECTED
2	REFERENCE VOLTAGE or NOT CONNECTED
3	0 VOLTS & CASE
4	R.F.OUTPUT
5	+VDC