



**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	SMD1496 OCXO
Spec	POC1496/10.0M~40.000M
A-Crystal P/N	AG2 Series

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



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Review Record

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



## 1. ELECTRICAL SPECIFICATIONS

### 1.1 FEATURE

- ① Dimension 14.5 x 9.6 x 6.5mm, pypical
- ② 6-Pin SMD Package
- ③  $\pm 30$  ppb stability over -40 to 85 °C
- ④ Stratum 3 (Overall  $\pm 4.6$  ppm including 20 years aging.)
- ⑤ Frequency Range, 10 MHz to 40MHz

### 1.2 TYPICAL APPLICATION

- ① SDH/SONET, Telecommunication Base Station
- ② Test and Measurement Equipment
- ③ Synthesizer , Digital switch , Reference Timing Circuit
- ④ Packet Timing Protocol (e.g. IEEE-1588)

### 1.3 Hold Type: POC1496

No.	Item		Electrical Specification				Remark
			Min.	Type	Max.	Units	
1	Nominal Frequency		10.00		40.00	MHz	
2	Waveform		Rectangular				
3	Level			COMS			
		"1" Level	2.4			V	
		"0" Level			0.4		
4	Load			15		PF	
5	Duty Cycle		45	50	55	%	@+1.65V
6	Spurious				-60	dBc	
7	Ambient		-30		+30	ppb	-40°C to +85°C, referenced to +25°C Refer to Freq. Stability Vs Temp. Range table.
8	Aging	Dally	-2.0		+2.0	ppb	after 30 days
		yearly	-0.4		+0.4	ppm	
		10 years	-2.0		+2.0	ppm	



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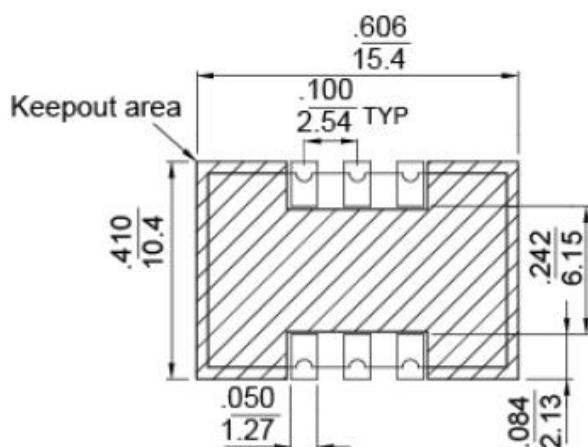
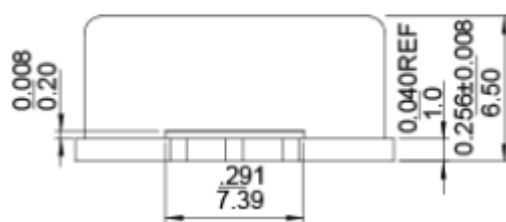
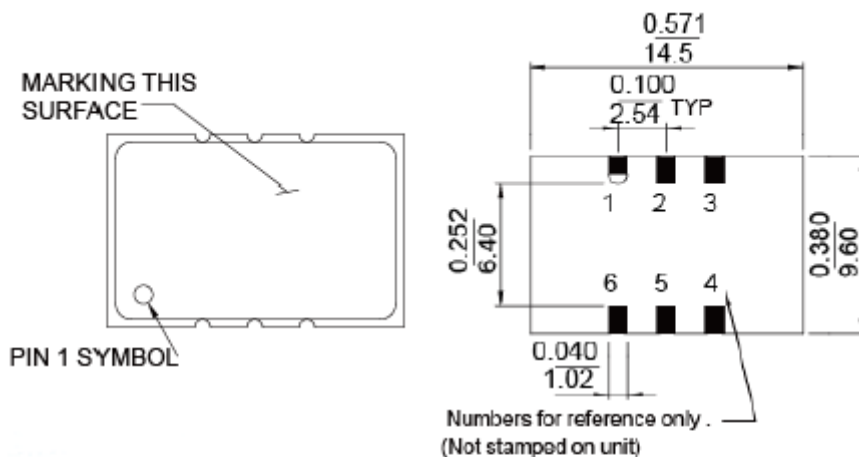


No.	Item	Electrical Specification				Remark	
		Min.	Type	Max.	Units		
9	Voltage	-5.0		+5.0	ppb	±5% Change	
10	Load	-10		+10	ppb	±10% Change	
11	Warm-up	-0.1		+0.1	ppm	in 5 minutes @ +25°C, referenced to 1 hour	
12	Electrical Frequency Adjustment						
13	Range			-5.0	ppm	VCO@ 0V	
		+5.0				VCO@ 3.3V	
14	Control	0	1.65	3.3	V		
15	Slope		Positive				
16	Input impedance	100			K Ω		
17	Input Power Voltage	3.135	3.3	3.465	V	5.0V input voltage is available.	
18	Current		500	600	mA	@ turn on	
19	Steady state		0.5	0.6	W	@ +25°C	
20	Phase Noise (20MHz)	@10Hz		-98	dBc/Hz		
21		@100Hz		-126		-120	
22		@1KHz		-145		-140	
23		@10KHz		-152		-150	
24	Package type	14.5*9.6*6.5					

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

## 2. PRODUCT SIZE

### 2.1 Dimension (Unit: mm)



Pin No.	Function
1	VCO INPUT or NOT CONNECTED
2	R.F.ENABLE or NOT CONNECTED
3	0 VOLTS ASD CASE
4	R.F.OUTPUT
5	NOT CONNECTED
6	+VDC

Note1: If the specification does not specify parameters for PIN 1, PIN 2 then that respective PIN is not internally CONNECTED. INCH/mm(REFERENCE ONLY)