

XHTF1045 CPT Atomic Clock

Features:

- Miniature structure
- Ultra-low consumption
- UART serial port communication
- Pin compatible with SA.45
- 1PPS input synchronization and 1PPS output

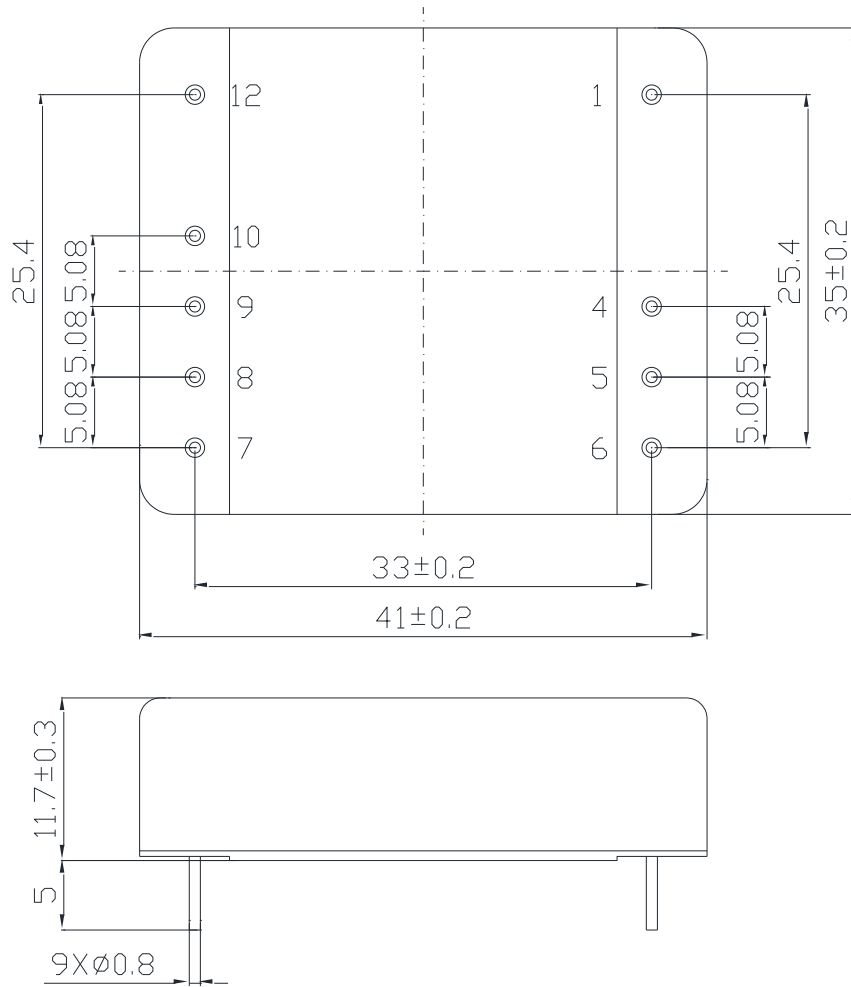


Main Specifications:

Output Frequency	10MHz	
Output Level	CMOS level, 0V ~ Vcc, output impedance 1MΩ	
Frequency Accuracy	<5E-11	
Short Term Stability	3.0E-10/1S 1.0E-10/10S 3.0E-11/100S	
Phase Noise (SSB)	@10Hz	≤-70dBc/Hz
	@100Hz	≤-113dBc/Hz
	@1KHz	≤-128dBc/Hz
	@10KHz	≤-135dBc/Hz
Frequency Drifting	≤9E-10/Month	
Steady State Power Consumption (@25°C)	≤0.25W@3.3V	
Power Supply	3.3Vdc ±0.1Vdc	
Warm Up Time (25°C)	≤3min to locked	
Frequency Adjustment Range	≥2E-8	
1PPs Input	Low level 0V ~ 0.3V, high level 2.3V ~ 3.0V, input impedance 1 MΩ	
1PPs Output	Low level <0.3V, high level>2.7V, high level width 0.1μs to 10μs, output impedance 1 MΩ	
1PPS Input Synchronization Function	1PPS SYNC accuracy is better than ±100ns	
1PPS Input Disciplined Accuracy	≤5E-12 (average value of 24 hours after one day discipline)	
Holding Performance	≤5μs (holding time difference of 24hours after one day discipline)	
Operating Temperature	-40°C~+70°C (80°C optional)	
Temperature Accuracy	1E-9 (≤5E-10 optical)	
Storage Temperature	-55°C~+85°C	
MTBF	100,000 hours	
Package	12 pin dual in-line package	
External Size	41 × 35 × 12 (mm ³)	
Weight	≤35g	



Dimension:



Pin Out:

Pin NO.	Function	Pin NO.	Function
1	NC	7	+3.3V
2	NC	8	GND
3	NC	9	1PPS input
4	Lock Status	10	1PPS output
5	TXD	11	NC
6	RXD	12	10MHz output