# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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## **OVEN CONTROLLED CRYSTAL OSCILLATOR**

## AOCJY4 Series

### **FEATURES**:

- 36.1x 27.2 x 13mm Leaded- RoHS Compliant Reflow-able Package
- SC-Cut, High "Q" resonator based design
- Either Sinewave or CMOS RF output
- Available with  $\pm 10$  ppb over  $-40^{\circ}$ C to  $+75^{\circ}$ C operating temperature Range
- Tighter Stabilities to  $\pm 2.0$  ppb over 0°C to +50°C also available
- Exceptional long-term Aging of ±500 ppb max. over 10-Year Product Life
- Excellent close-in phase noise (-140 dBc/Hz Typical @100 Hz offset; 10MHz carrier)

### **STANDARD SPECIFICATIONS:**





### > APPLICATIONS:

- Cellular Infrastructure
- Radar Systems
- Test & Measurement Equipment
- GPS Tracking with precision hold-over accuracy
- WiMax / WLAN

Parameters	Minimum	Typical	Maximum	Units	Notes
RF Output					
Frequency	10.00		40.00	MHz	Overall Frequency range
Standard Available Frequencies	10.00, 1				
Waveform					
Level "1" (Logic High)	4.50			Volts	
Level "0" (Logic Low)			0.50	Volts	
Load		15		pf	
Rise & Fall Time			6.0	ns	
Duty Cycle	45		55	%	
Waveform					
Peak Power	2.00			dBm	
Output Load		50		Ω	
Short Term Stability		1x10 <sup>-10</sup>		/second	Alan Variance
Operable Temperature Range	-40		75	° C	See Stability Options
Frequency Stability Options					
0° C to +50°C (Note #1)			±2.00	ppb	Default Spec.
-20° C to +70°C			±10.00	ppb	Option "E"
-40° C to +75°C			±10.00	ppb	Option "F"
Frequency Stability vs. Supply Voltage (Vdd ± 5%)			±1.00	ppb	
Frequency Stability vs. Load Variation (± 10%)			±1.00	ppb	
Warm-Up @ 25 °C			±100.00	ppb	In $\leq$ 3-minutes
Power Consumption @ turn on			4.00	Watts	
Power Consumption Steady State			1.50	Watts	
Supply Voltage (Vdd)	4.75	5.00	5.25	Volts	See Options

*Note* #1:

 $\pm 2.00$  ppb stability is only available for F0  $\leq 13$  MHz. For frequencies above 13MHz, the best available frequency stability is  $\pm 10.00$  ppb over  $-20^{\circ}$ C to  $+70^{\circ}$ C





## **OVEN CONTROLLED CRYSTAL OSCILLATOR**

AOCJY4 Series



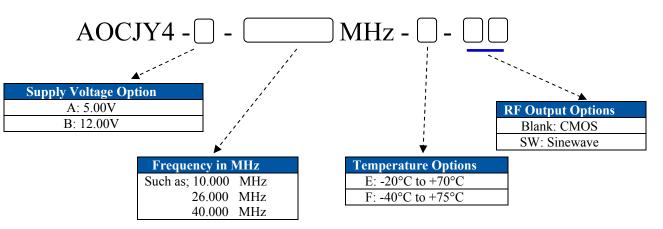
Pb



#### **STANDARD SPECIFICATIONS - continued.**

Parameters	Minimum	Typical	Maximum	Units	Notes
Aging					
Daily			±1.0	ppb	
First Year			±100	ppb	
10-Years			±500	ppb	
Spectral Content					
Spurious Response			-35	dBc	
Phase Noise (10MHz Carrier) @ 5V					
(a) 1 Hz offset			-90	dBc	
@ 10 Hz offset			-120	dBc	
(a) 100 Hz offset			-140	dBc	
@ 1,000 Hz offset			-145	dBc	
@ 10,000 Hz offset			-150	dBc	
Electrical Frequency Adjustment					
Control Voltage Range (Vc)	0.0		5.00	Volts	
Frequency Pull Range	±0.700			ppm	
Frequency Pull Slope		Positive			
Control Voltage Port Impedance	10			kΩ	
Center Control Voltage	2.00	2.50	3.00	Volts	
Control Port Linearity		±10		%	
Reference Voltage (Vdd=5.0V)	4.40	4.50	4.60	Volts	Output @ Pin#2
Reference Voltage (Vdd=12.0V)	4.90	5.00	5.10	Volts	Output @ Pin#2
Storage Temperature	-40		+100	° C	

#### **OPTIONS AND PART IDENTIFICATION (Left blank if standard)**







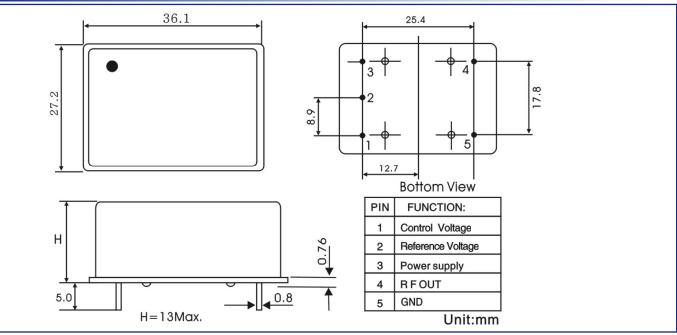
## **OVEN CONTROLLED CRYSTAL OSCILLATOR**

RoHS Compliant 36.15

AOCJY4 10.00MHz 10G 36.1x 27.2 x 13mm

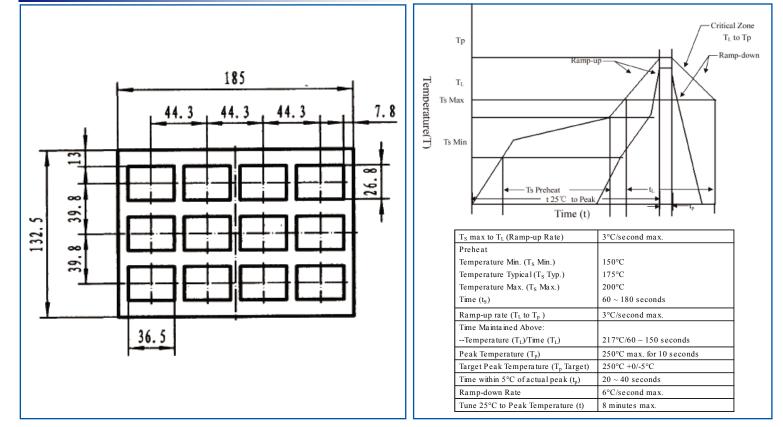
AOCJY4 Series

### > OUTLINE DIMENSIONS



#### **PACKAGING:** 12 pcs/tray

#### **REFLOW PROFILE:**



**ATTENTION:** Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

ABRACON IS ISO9001:2008 CERTIFIED



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