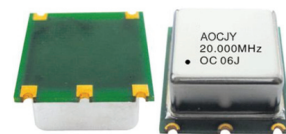


SMD OVEN CONTROLLED CRYSTAL OSCILLATOR

AOCJY Series



RoHS
Compliant



25.4 x 22.1 x 12.5 mm

FEATURES:

- 25.4 x 22.1 x 12.5 mm True SMT- RoHS Compliant Reflow-able Package
- SC-Cut, High "Q" resonator based design
- Either Sinewave or HCMOS RF output
- Available with ± 30 ppb over -40°C to $+75^{\circ}\text{C}$ operating temperature Range
- Tighter Stabilities to ± 5.0 ppb over 0°C to $+50^{\circ}\text{C}$ also available
- Exceptional long-term Aging of ± 500 ppb over 10-Year Product Life
- Excellent close-in phase noise (-130 dBc/Hz Typical @ 100 Hz offset from 10MHz carrier)

APPLICATIONS:

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

STANDARD SPECIFICATIONS:

PARAMETERS	
ABRACON P/N	AOCJY Series
Available Frequency Range	1.000MHz to 160.000MHz
Standard Frequencies	10.00, 12.80, 13.00, 16.384, 20.00, 26.00, 38.40, 38.88, 40.00, 100.00 MHz
Operating Temperature	0°C to $+50^{\circ}\text{C}$ (Standard Default, see options below)
Freq. Stability vs. Temp. 0°C to $+50^{\circ}\text{C}$ -20°C to $+70^{\circ}\text{C}$ -40°C to $+75^{\circ}\text{C}$	± 5.00 ppb max.
	± 10.00 ppb max.
	± 30.00 ppb max.
Aging: daily aging yearly aging 10 year aging	± 1.0 ppb
	± 100 ppb
	± 500 ppb
Supply Voltage (Vdd)	$3.3\text{Vdc} \pm 5\%$ (see options)
Power at Turn-on	3.60 Watts Max.
Steady State @ 25°C	1.40 Watts Max.
Output Load	15pF (for CMOS output)
	50 Ω (for Sinewave output)
Output Voltage (HCMOS)	$\text{VOH} = 0.9 * \text{Vdc min.} ; \text{VOL} = 0.1 * \text{Vdc max.}$
Output Voltage (Sinewave)	2.0 dBm min.
Duty Cycle (HCMOS)	45%/55% Typ.
Rise & Fall Times (HCMOS)	5ns max.
Control Voltage Range	0 to Vdd
Frequency Pull Range	$\pm 0.70\text{ppm Min.}$
Frequency Pull Slope	Positive
Center Control Voltage	$(\text{Vdd}/2) \pm 0.5\text{V}$
Control Voltage Port Impedance	10k Ω min.
Spurious Response	-70 dBc
Phase noise (10MHz carrier)	
	@ 1 Hz offset -90 dBc/Hz
	@ 10 Hz offset -100 dBc/Hz
	@ 100 Hz offset -130 dBc/Hz
	@ 1,000 Hz offset -140 dBc/Hz
	@ 10,000 Hz offset -150 dBc/Hz

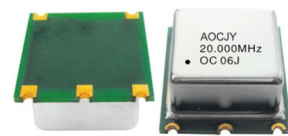


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OPTIONS AND PART IDENTIFICATION (Left blank if standard)

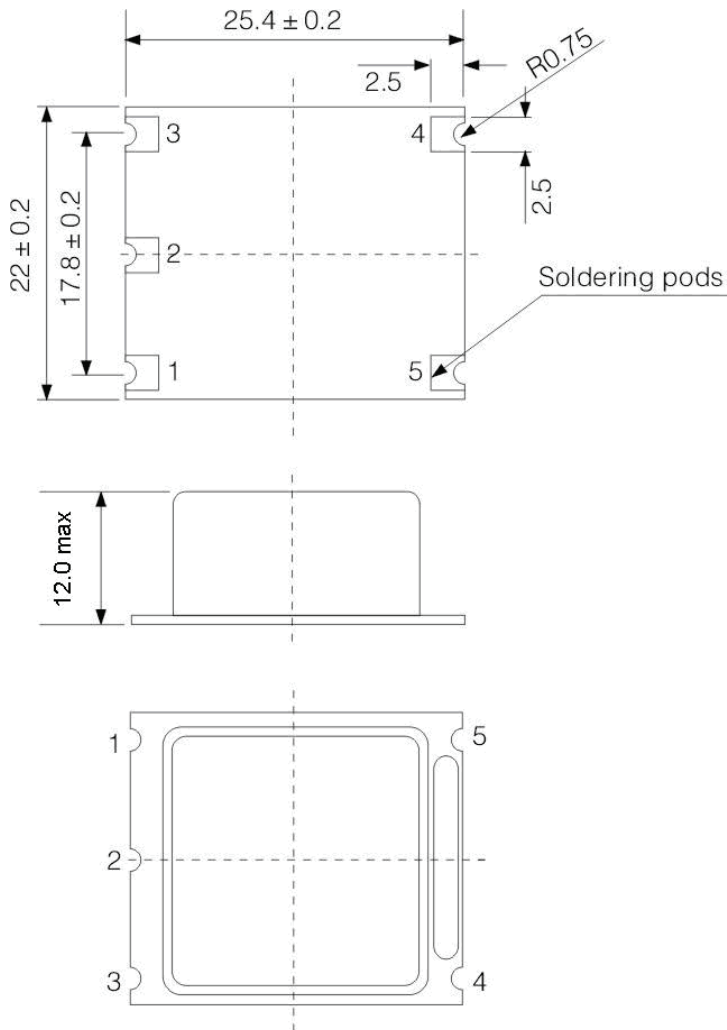
AOCJY□ - Frequency - □ - □□

Supply Voltage Option	
Blank	3.3 V
A	5.0 V

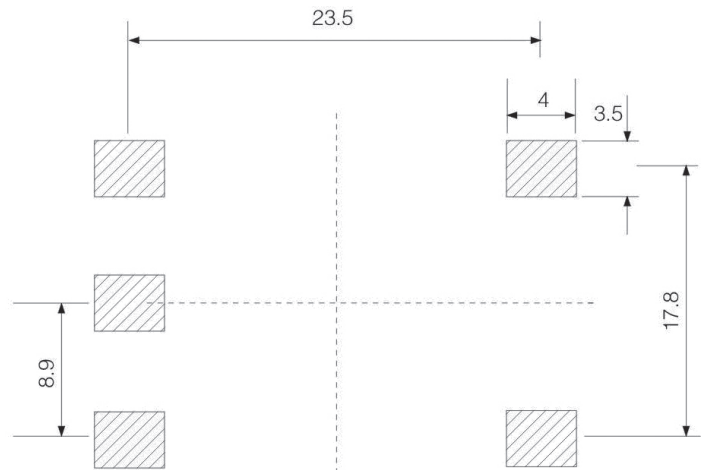
Temperature Options	
E	-20°C to +70°C
F	-40°C to +75°C

RF Output	
Blank	CMOS
SW	Sinewave

OUTLINE DIMENSIONS



Recommended Soldering Pattern



PIN	FUNCTION
1	Control voltage VC
2	Reference voltage output V _{REF}
3	Supply voltage V _B
4	RF- output
5	Ground. case

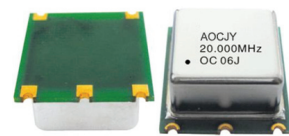
Dimensions: Inches (mm)

SMD OVEN CONTROLLED CRYSTAL OSCILLATOR

AOCJY Series

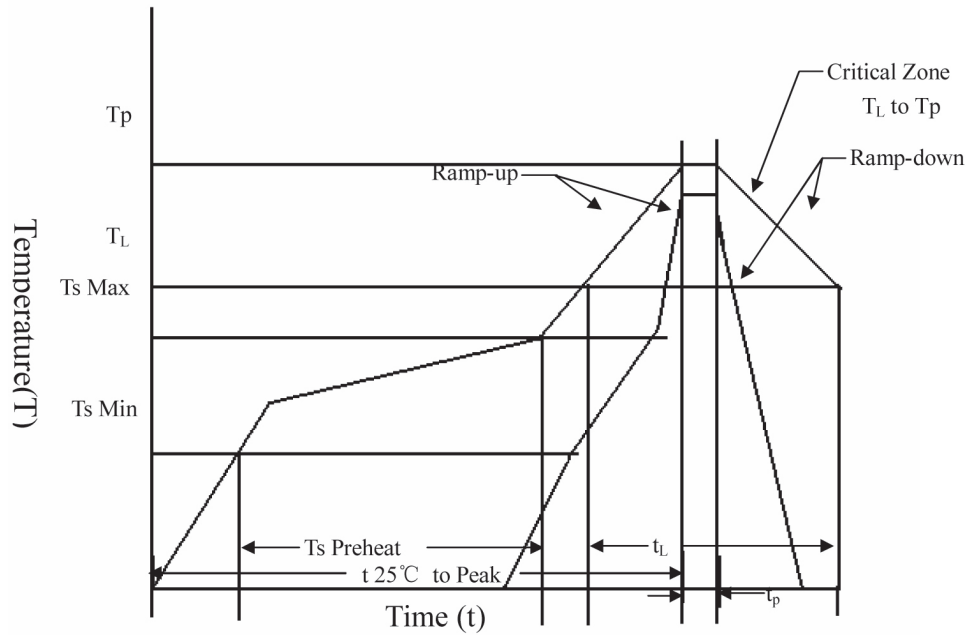


RoHS
Compliant



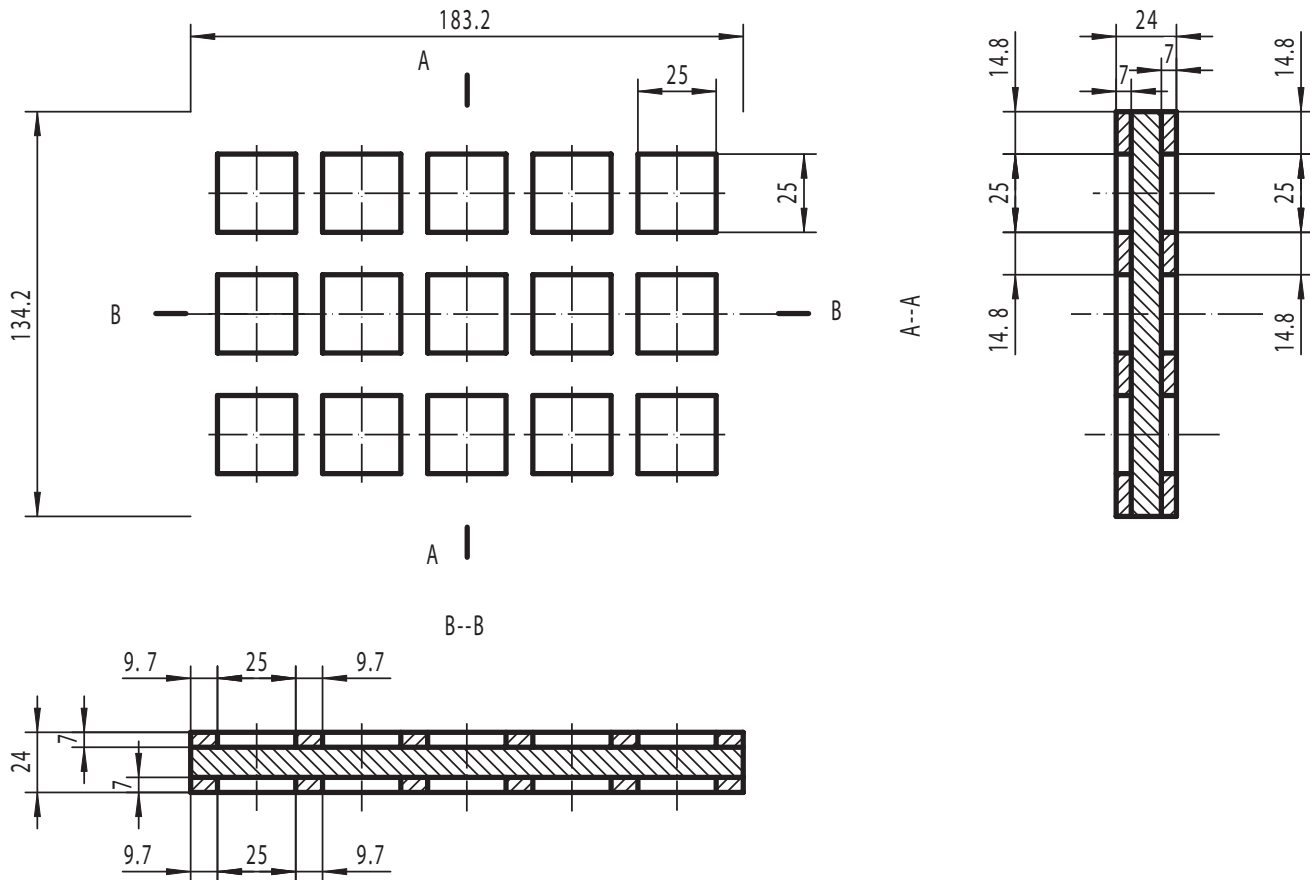
25.4 x 22.1 x 12.5 mm

REFLOW PROFILE



PACKAGING

Units are packaged in appropriate size trays, similar to as shown below:



ABRACON IS
ISO 9001 / QS 9000
CERTIFIED



ABRACON
CORPORATION

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30332 Esperanza, Rancho Santa Margarita, California 92688

tel 949-546-8000 | fax 949-546-8001 | www.abracon.com