

FULL SIZE DIP LOW VOLTAGE 3.3V CRYSTAL CLOCK OSCILLATOR

ACOL Series



RoHS
Compliant



20.2 x 12.6 x 5.08 mm

FEATURES:

- Tristate Enable/Disable option.
- Low supply voltage.
- HCMOS and TTL compatible.
- Tight symmetry option.

APPLICATIONS:

- Clock signal sources for digital chips and microprocessors.
- Low power applications.

STANDARD SPECIFICATIONS:

PARAMETERS

ABRACON P/N	ACOL Series
Frequency:	320kHz to 200MHz
Operating temperature:	0°C to + 70°C (see options)
Storage temperature:	- 55°C to + 125°C
Frequency Stability:	± 100ppm max. (see option)
Supply voltage (Vdd):	3.3Vdc ± 10%
Symmetry at 1/2Vdd for HCMOS or at 1.4Vdc for TTL	45/55% max. for F < 50MHz 40/60% max. for F ≥ 50MHz (see options)
Rise and Fall Times(Tr/Tf):	10 ns max. for F ≤ 24MHz 5 ns max. for F > 24MHz, 10 ns max. for F > 24MHz (50pF output load)
Output load:	10 TTL or 15 pF for F < 80MHz 5 TTL or 15 pF for F ≥ 80MHz
Output Voltage:	VOH = 0.9*Vdd min. VOL = 0.1*Vdd max.
Tri State Function (option A):	"1" (VIH ≥ 2.2 Vdc) or open: Oscillation "0" (VIL < 0.8V): Hi Z
Start-up-time:	10 ms max
Oput Disable/ Enable time:	100 ns max. (for Option "-A" ONLY)
Input current:	20 mA max. for F ≤ 24 MHz 30 mA max. for F < 50 MHz 45 mA max. for F < 80 MHz 55 mA max. for F ≥ 80 MHz

OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ACOL - Frequency - □ - □ - □ - □ - □ - □

Operating Tem. Range	
I	0°C to +50°C
D	-10°C to +60°C
E	-20°C to +70°C
F	-30°C to +70°C
N	-30°C to +85°C
L	-40°C to +85°C

Symmetry	
S	45/55% @ 1/2Vdd
T	47.5/52.5% @ 1/2Vdc
S1	45/55 @ 1.4Vdc
T1	47.5/52.5% @ 1/4Vdc

Value Added	
G	Gull Wing
G3	Gull Wing
Q30	0.30(7.62)
Q25	0.25(6.35)
Q20	0.20(5.08)
Q15	0.15(3.81)
Q10	0.10(2.54)

Freq. Stability	
J*	±20 ppm max.
R	±25 ppm max.
K	±30 ppm max.
H	±35 ppm max.
C	±50 ppm max.

Tristate	
A	Tristate Function

Output Load	
50	50pF (25°F ≤ 100MHz only)

* Temp orption I, D, E, and 0 to +70°C only.

ABRACON IS
ISO9001:2008
CERTIFIED



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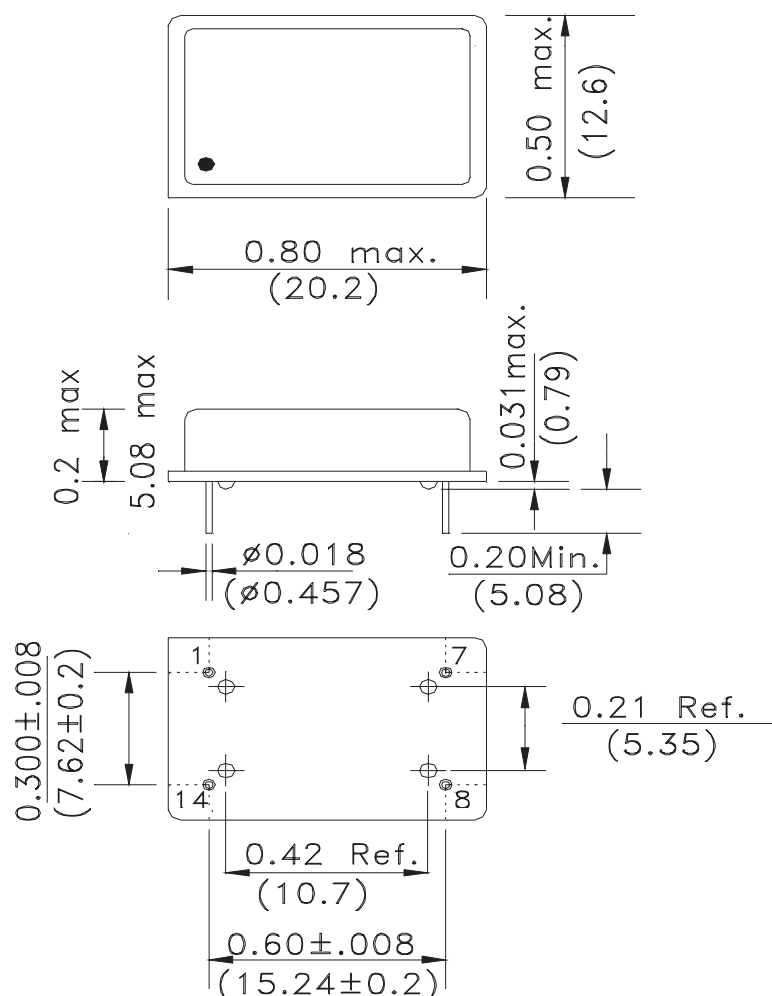


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20.2 x 12.6 x 5.08 mm

OUTLINE DIMENSIONS:



The height of the package vary depending on the frequency >100MHz.
Please contact ABRACON for the height information for F>100MHz.

PIN	FUNCTION
1	NC or Tristate
7	GND/Case
8	Output
14	VDD

Note: Recommend using an approximately
0.01uF bypass capacitor between PIN 7 and 14

Dimensions: inches (mm)

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