

FULL SIZE DIP LOW VOLTAGE 3.3V CRYSTAL CLOCK OSCILLATOR



20.2 x 12.6 x 5.08 mm

ACOL Series



RoHS
Compliant

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 (25sF≤100MHz only) |

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

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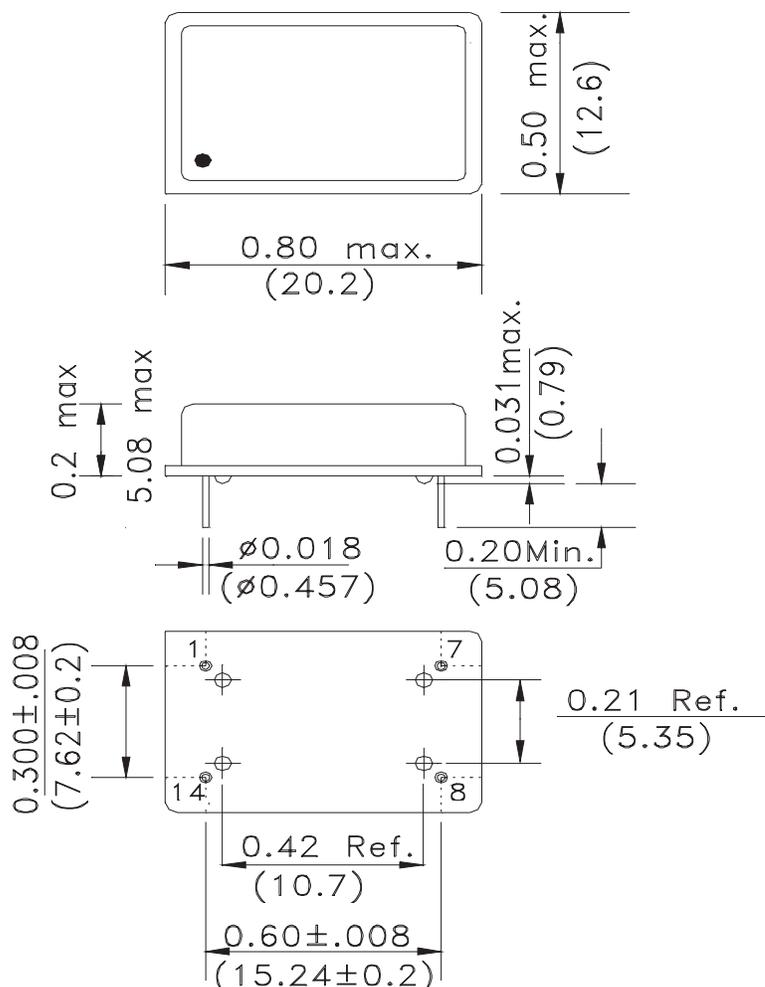


RoHS
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20.2 x 12.6 x 5.08 mm

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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