

# FULL SIZE DIP LOW VOLTAGE 3.3V CRYSTAL CLOCK OSCILLATOR



20.2 x 12.6 x 5.08 mm

ACOL Series



RoHS/RoHS II 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		Minimum	Typical	Maximum	Units	Notes
Frequency Range		0.320		200.000	MHz	
Operating Temperature		0		+70	°C	See options
Storage Temperature		-55		+125	°C	
Overall Frequency Stability		-100		+100	ppm	See options
Supply Voltage (Vdd)		2.97	3.3	3.63	V	
Input Current	320.000kHz ~ 24.000MHz			20	mA	
	24.001MHz ~ 49.999MHz			30		
	50.000MHz ~ 79.999MHz			45		
	80.000MHz ~ 200.000MHz			55		
Symmetry @ 1/2Vdd for HCMOS or @ 1.4Vdc for TTL	320.000kHz ~ 49.999MHz	45		55	%	See options
	50.000MHz ~ 200.000MHz	40		60		
Rise and Fall Time (Tr/Tf)	320.000kHz ~ 24.000MHz			10	ns	
	24.001MHz ~ 200.000MHz			5		
	24.001MHz ~ 200.000MHz (50pF output load)			10		
Output Load	32.000kHz ~ 79.999MHz			15	pF	See options
				10	TTL	
	80.000MHz ~ 200.000MHz			15	pF	
				5	TTL	
Output Voltage	VOH	0.9*Vdd			V	
	VOL			0.1*Vdd	V	
Tri-state Function (Option A)	VIH	2.2			V	"1" or Open: Oscillation
	VIL			0.8	V	"0": Output disable (Hi Z)
Output Enable time				4	ms	For option A only
Output Disable time				100	ns	For option A only
Startup Time				10	ms	

\* Overall frequency stability includes initial tolerance and temperature stability.

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**Pb** RoHS/RoHS II compliant

## OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ACOL- [ ] MHz- [ ] - [ ] - [ ] - [ ] - [ ]

Frequency in MHz
e.g. 24.576MHz
14.31818MHz
26.000MHz

Operating Temp.
I: 0°C ~ +50°C
D: -10°C ~ +60°C
E: -20°C ~ +70°C
F: -30°C ~ +70°C
N: -30°C ~ +85°C
L: -40°C ~ +85°C

\* Temp option I, D, E only and 0 to +70°C only

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

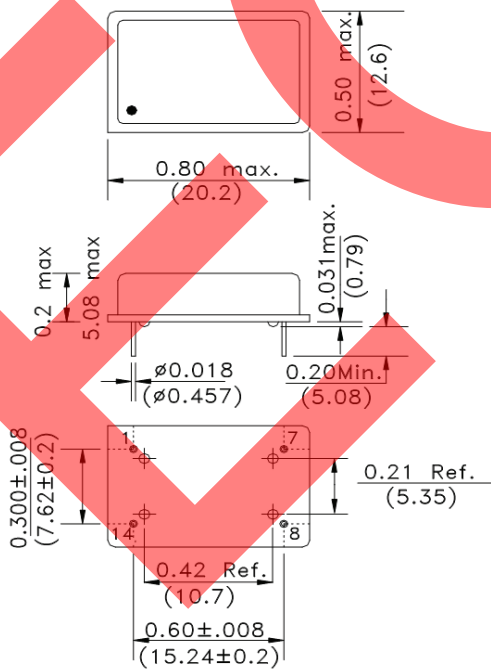
Symmetry
S: 45/55%@1/2Vdd
T: 47.5/52.5%@1/2Vdd

Pin form
G: Gull Wing
Q25: 0.25" (6.35)
Q20: 0.20" (5.08)
Q15: 0.15" (3.81)

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

Tri-state
A: Tri-state on pin 1

## OUTLINE DIMENSIONS:



Pin	Function
1	Tri-State/NC
7	GND
8	Output
14	Vdd

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

Dimensions: inches (mm)

Packaging: 25pcs /tube

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