CRYSTAL OSCILLATOR

HCO–02, HO–06 Series

HUAFENG CRYSTAL

- HCMOS / TTL output
- 5.0V/3.3V suppy voltage
- 14 pin / 8 pin DIP package
- Custom lead length options available
- Wide frequency
- All-metal welded package

■ ELECTRICAL SPECIFICATIONS

Frequency Range		1.000 to 125.000MHz	
Operating Temperature Range		0 to + 70°C or -40 to +85°C	
Storage Temperature Range		-55 to +125°C	
Supply Voltage(V_{DD})		5.0V_{DC} ± 10%	3.3V_{DC} ± 10%
Frequency Tilerance/Stability		±100, ±50, ±25 ppm Max	
Input Current	1.000 to 20.000MHz	20ma Max	15Ma Max
	20.001 to 40.000MHz	30ma Max	25Ma Max
	40.001 to 80.000MHz	40ma Max	35Ma Max
	80.001 to 125.000MHz	50ma Max	45Ma Max
Load drive Capability		10TTL Load or 15pf HCMOS Load	
Output Voltage Logic High(V_{OH})	w/TTL Load	2.4V_{DC} Min	
	w/HCMOS Load	90% of V_{DD} Min	
Output Voltage Logic Low(V_{OL})	w/TTL Load	0.4V_{DC} Max	
	w/HCMOS Load	10% of V_{DD} Max	
Duty Cycle	at 50% of Waveform w/HCMOS Load or 1.4V_{DC} w/TTL Load	50±10%(STD)	
		50±5%(Optional)	
Rise / Fall Time	1.000 to 20.000MHz	10nsec Max	
	20.001 to 70.000MHz	6nsec Max	
	70.001 to 125.000MHz	4nsec Max	
Aginglat 25°C)		±5ppm/year Max	
Start up Time		10msec Max	
Pin I Tri–State Input Voltage	No Connection	Enables Output	
	V_{IH}:≥2.0V_{DC}	Enables Output	
	V_{IL}:≤0.8V_{DC}	Disables Output:High Impedance	
Period Jitter:Absolute		±100ps Max	
Period Jitter:One Sigma		±25ps Max	

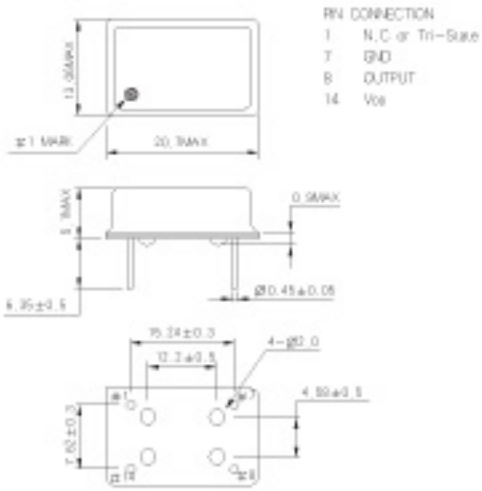
PART NUMBERING GUIDE

HCO-02 0 50 A D S - 10.000M

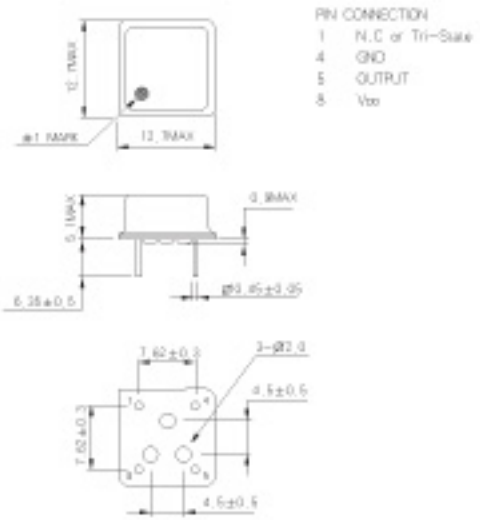
- 02:Full Size
  04:Half Size
- OUTPUT
  0:5.0V
  3:3.3V
- FREQUENCY STABILITY
  25:±25ppm
  50:±50ppm
  BLANK:±100ppm
- OPERATING TEMPERATURE RANGE
  A:-40 to +80℃
  B:-20 to +70℃
  BLANK:0 to +70℃
- DUTY CYCLE
  D:45/55
  BLANK:40/60
- PIN 1 CONNECTION
  S:TRI-STATE,E/D
  BLANK:NO CONNECTION
- FREQUENCY
  M:MHz

MECHANICAL DIMENSIONS

HCO-02



HCO-06



ENVIRONMENTAL / MECHANICAL SPECIFICATIONS

PARAMETER	SPECIFICATIONS
Seal Integrity	Bubble test in Perfluorocarbon at +125℃ ± 5℃ for 60 seconds minimum.
Solderability	Sn63 Solder dip at +230℃ ± 5℃ for 5 seconds/95% coverage.
Marking Permanency	10 Stokes with brush after 1 minute soak in solvent,3 times.
Shock	Random drop on hard wooden plate 3 times from a height of 50cm.
Vibration	Frequency with an amplitude of 1.5mm sweeping between 10Hz to 55Hz within 1 minute(approximately) for 2 hours minimum on each axis (X,Y and Z)for a total of 6 hours.