



# FULL SIZE CLOCK OSCILLATORS TTL COMPATIBLE

## • HO-11 Series



The HO-11 series oscillator is TTL compatible and features fast rise/fall times with high reliability at low cost. The metal package with pin#7 case ground acts as shielding to minimize EMI radiation.

### FEATURES

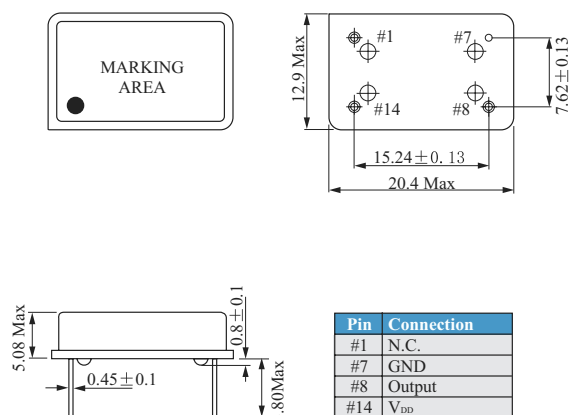
- 10TTL output Load
- 14 Pin Full Size
- Industry Standard
- Wide Frequency Range
- Low Cost
- Resistance Weld Package

## Electrical Specifications

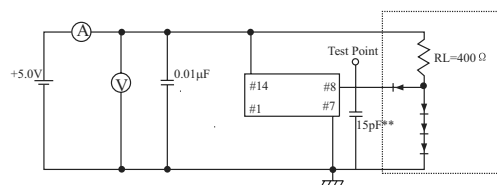
Parameter	Condition	HO-11	
Frequency Range	F <sub>0</sub>	0.5MHz~100.00MHz	
Frequency Stability*	All Condition*	± 25ppm, ± 50ppm, ± 100ppm	
Operating Temperature Range	T <sub>OPR</sub>	0°C~70°C (-40°C~+85°C option)	
Storage Temperature Range	T <sub>STG</sub>	-55°C~+125°C	
Power supply Voltage	V <sub>DD</sub>	5.0V+/-10%	
Aging(First Year)	25°C ± 3°C	± 5ppm	
Supply Current	I <sub>DD</sub>	0.5MHz to 23.999MHz	15mA Max
		24.000MHz to 69.999MHz	30mA Max
		70.000MHz to 100.000MHz	60mA Max
Output Symmetry	Sym	At 1.4V	40/60%(45/55% Option)
Rise time	T <sub>r</sub>	0.4V~2.4V	5 nS Max
Fall Time	T <sub>f</sub>	2.4V~0.4V	5 nS Max
Output Voltage	V <sub>OH</sub>		2.4 Vmin
	V <sub>OL</sub>		0.4 Vmax
Output load	TTL Load		1~10TTL
Start-up Time	T <sub>s</sub>		10mS Max

\*Include: 25°C tolerance, operating temperature range, input voltage change, aging, load change, shock and vibration

## Mechanical Dimensions(mm)

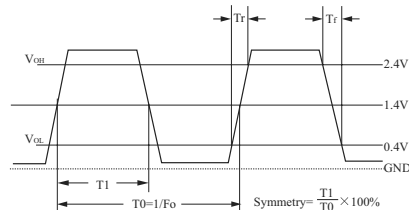


## TTL Test Circuit



\*\*Includes stray and probe capacitance

## TTL Output Waveform



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Specifications are subject to change without notice