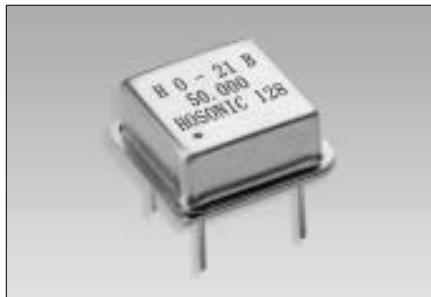


# HALF SIZE CLOCK OSCILLATORS TTL COMPATIBLE

## • HO-21 Series



The HO-21 series oscillator is TTL compatible and features fast rise/fall times with high reliability at low cost. The metal package with pin#4 case ground acts as shielding to minimize EMI radiation.

### FEATURES

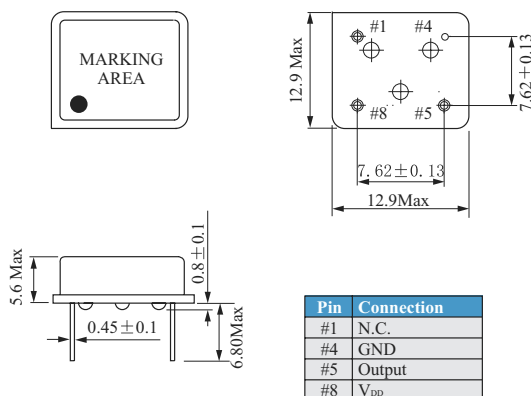
- 10TTL Output Load
- 8 Pin Half Size
- Industry Standard
- Wide Frequency Range
- Low Cost
- Resistance Weld Package

## Electrical Specifications

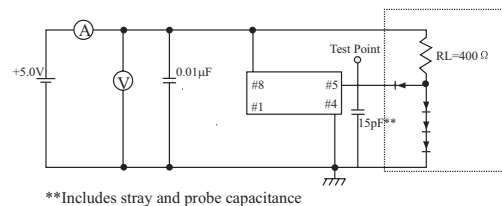
Parameter	Condition	HO-21
Frequency Range	F <sub>0</sub>	0.5MHz~100.00MHz
Frequency Stability*	All Condition*	± 25ppm, ± 50ppm, ± 100ppm
Operating Temperature Range	T <sub>OPR</sub>	0°C~70°C(-40°C~+85°C option)
Storage Temperature Range	T <sub>STG</sub>	-55°C~+125°C
Power supply Voltage	V <sub>DD</sub>	5.0V+/-10%
Aging(First Year)	25°C ± 3°C	± 5ppm
Supply Current	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
Rise time	T <sub>r</sub>	0.4V~2.4V
Fall Time	T <sub>f</sub>	2.4V~0.4V
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



### TTL Output Waveform

