



**PRODUCTS**

**Oven Controlled Crystal Oscillator (Through Hole)**

**Typical Applications:**

- Data Communications
- Telecommunication System
- Instrumentation

# OC20 Series (Through Hole Oven Controlled Crystal Oscillator Series)

**Part Number: OC20 Series - Waveform - Stability - Freq - Vcc - Pulling**

**Example: OC20HA-10.000-5.0V-D**

**Specification**

**OC20**

Part No.	Example
OC20 Series - Waveform - Stability - Freq - Vcc -Pulling	OC20HA-10.000-5.0V-D

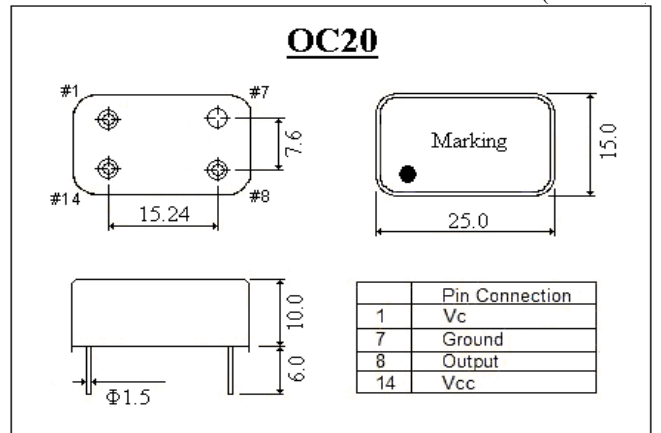
Specification	OC20	
Frequency Range	1.250 ~ 40.000MHz	
Output Waveform	HCMOS / TTL / Low Voltage CMOS	
Frequency Stability vs. Temperature	A: $\pm 1 \times 10^{-7}$ 0°C to +60°C    D: $\pm 1.5 \times 10^{-7}$ 0°C to +60°C	
	B: $\pm 2 \times 10^{-7}$ -30°C to +70°C    E: $\pm 3 \times 10^{-8}$ -30°C to +70°C	
	C: $\pm 5 \times 10^{-7}$ -40°C to +80°C    F: $\pm 5 \times 10^{-8}$ -40°C to +80°C	
Short Term Stability	$2 \times 10^{-10}$ / sec or $2 \times 10^{-11}$ / sec	
Rise and Fall Time	6 nsec max. (10% / 90% Vout)	
Frequency Stability vs. Load Deviation	$\pm 0.01$ ppm/year max. @ $\pm 5\%$ delta or $\pm 0.003$ ppm/year max. @ $\pm 5\%$ delta	
Frequency Stability vs. Supply Deviation	$\pm 0.015$ ppm/year max. @ $\pm 5\%$ delta or $\pm 0.003$ ppm/year max. @ $\pm 5\%$ delta	
Frequency Stability vs. Aging	$\pm 0.5$ ppm/year or $\pm 0.1$ ppm/year	
Supply Voltage (Vcc)	12V, 5V, 3.3 (optional)	
Power Dissipation (Steady State)	1.5W max.	
Heat Up Power	3.6W max.	
Heat Up Time	3 mins max.	
Duty Cycle	40 / 60% ( at 50% Vcc)	
Pulling	N: No frequency adjustment / D: $\pm 4$ ppm (typ.) / E: $\pm 0.5$ ppm (typ.)	
Phase Noise	<b>Offset</b>	<b>Phase Noise</b>
	10Hz	-95dBc/Hz
	100Hz	-130dBc/Hz
	1KHz	-140dBc/Hz
	10KHz	-145dBc/Hz

Note: This is a typical parameter spec., please contact us for detail specification sheet.



**Dimension**

(Unit: mm)



**HIGH PRECISION OSCILLATOR**