



LOW POWER CONSUMPTION OCXO IN 20.3x20.3x14.0 mm DIP PACKAGE - OCM37H Series

FEATURES

- RoHS Compliant, Wide Frequency Range (30-300 MHz, at multiplication), HCMOS/TTL or Sinewave Output
- Low Power Consumption (0.15W at 25°C), Very Fast Warming-up (60 s TYP)
- High Stability (up to ± 5 ppb over -40°C to 85°C), Low Allan Variance: 20E-12 at 1s average time
- Low Aging (5E-10/day, 5E-8/year -100MHz), Hermetically Sealed Steel Package, Standard Lead Spacing

SPECIFICATIONS

Frequency Stability vs. Temp	5= ± 5 ppb; 10= ± 10 ppb; 50= ± 50 ppb; 100= ± 100 ppb; (Not all combinations are available. Consult factory)
Temperature Range	A = 0°C to 70°C; B = -40°C to 85°C; C = -10°C to 60°C; D = -20°C to 70°C
Aging (after 30 days)	± 0.5 ppb Maximum per day; ± 0.05 ppm Maximum 1st year
Frequency vs. Voltage	± 2 ppb ref Vcc Typ
G-Sensitivity	± 1 ppb/G, Worst direction
Storage Temperature Range	-60°C to 90°C
Phase Noise(Typ, 100MHz)	-95 dBc/Hz @10Hz; -130 dBc/Hz @100Hz, -145 dBc/Hz @1KHz -150 dBc/Hz @10KHz, -155 dBc/Hz @100KHz
Allan Variance	20e-12 / 1s Typ
Input Voltage (Vcc)	A = +5 VDC $\pm 5\%$; B = +3.3 VDC $\pm 5\%$
Power Consumption (Typ)	Steady state, +25°C: 0.15W; Warm-up state: 0.7W
Warm-up Time	60 second Max, to 0.1 ppm accuracy, at +25°C
HCMOS Output Load	15 pF
Output Waveform	HCMOS compatible square wave; 45/55% Duty cycle
Logic "1" / Logic "0" Level	3.8V Min/ 0.4V Max; Rise/Fall time: 10 ns Max for 10MHz
Sinewave Output Load	50 Ohms Typ
Output Level	+6 dBm Min, +8 dBm Typ, +10 dBm Max
Sub-harmonics Level	-40 dBc Max
Electric Tuning Range	± 0.5 ppm Min, ± 1 ppm Typ
Control Voltage Range	0 to 4.2V for Vcc=5V; 0 to 2.8V for Vcc=3.3V. Tuning slope - positive
Reference Voltage (Vref)	4.2V Typ (4.05 Min/4.35 Max) Vcc=5V; 2.8V Typ (2.70 Min/2.9 Max)

Creating a Part Number

OCM37H-12M800-A 50 D T(S)

Product Series	Output option: T = HCMOS/TTL; S = Sinewave
Frequency	Operating Temperature Range: A = 0 to 70°C
Supply Voltage: A = 5.0V	Frequency Stability: B = -40 to 85°C
B = 3.3V	10 = ± 10 ppb D = -20 to 70°C
	50 = ± 50 ppb X = Customized Temp Range
	100 = ± 100 ppb

OUTLINE DRAWING

