



HCMOS SQUAREWAVE OUTPUT OCXO IN 20.3x20.3 mm DIP PACKAGE - OC20C Series

FEATURES

- RoHS Compliant, Wide Frequency Range (5 MHz to 150 MHz)
- SC-cut Crystal, Stratum3 or Better Stability, 15 pF HCMOS Square Wave Output
- Voltage Control Option, Industry Standard Lead Spacing
- Standard Frequencies: 10, 12, 12.8, 13, 14.4, 16.384, 32.768, 100.00 MHz

SPECIFICATIONS

Frequency Stability vs. Temp	5 = ± 5 ppb; 10 = ± 10 ppb; 20 = ± 20 ppb; 50 = ± 50 ppb; 100 = ± 100 ppb
Temperature Range	A = 0°C to 70°C; B = -40°C to 85°C; D = -20°C to 70°C
Aging (after 30 days)	± 0.1 ppb per day; ± 0.015 ppm per year - 10MHz part
Initial Tolerance	± 0.1 ppm Typ, at 25°C, $V_c = 1/2 V_{ref}$
Frequency vs. Load	± 0.02 ppm Typ / $\pm 5\%$ load change
Frequency vs. Voltage	± 0.02 ppm/V Typ
Storage Temperature Range	-60°C to 90°C
Phase Noise(Typ)	-121 dBc/Hz @10Hz, -141 dBc/Hz @100Hz -155 dBc/Hz @1KHz, -160 dBc/Hz @10KHz
G-Sensitivity	± 1.0 ppb/G Typ, Worst direction
Input Voltage (Vcc)	A = +5 VDC $\pm 5\%$; B = +3.3 VDC $\pm 5\%$; T = +12 VDC $\pm 5\%$
Input Power (Max)	Steady state: 1200 mW at 25°C Start-up: 3500 mW
Output Load	15 pF
Warm-up Time	3 minutes Maximum, to ± 0.1 ppm accuracy
Output Waveform	HCMOS compatible square wave; 45/55% Duty cycle
Logic "1" / Logic "0" Level	3.7V (5V, 12V part); 2.4V (3.3V part) / 0.4V Typ
Rise/Fall Time (Tr/Tf)	10 ns Maximum
EFC Range	± 0.3 ppm Minimum, Control voltage $V_c = 0$ to 4.2V (5V, 12V), 3.1V (3.3V)
Linearity / Slope	$\pm 10\%$ Maximum of best straight line fit / Positive
EFC Input Impedance	100 kOhms Minimum

Creating a Part Number

OC20C-12M800-A 50 D V	(Not all combinations are available. Consult factory)
Product Series	EFC option or blank
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

