



HCMOS SQUAREWAVE OUTPUT OCXO IN 1"x1" DIP PACKAGE - OC25C Series

FEATURES

- Wide Frequency Range (1 MHz to 100 MHz), 15 pF HCMOS Square Wave Output
- AT-cut or SC-cut Crystal, Stratum3 or Better Stability, 5V or 12V Supply Voltage
- 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	50 = ± 50 ppb; 100 = ± 100 ppb; 500 = ± 500 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)	1E-7 first year, at 10MHz AT-cut
Initial Tolerance	± 0.05 ppm Typ, at 25°C, Vc = 1/2 Vcc
Frequency vs. Load	± 0.02 ppm Typ / $\pm 5\%$ load change
Frequency vs. Voltage	± 0.02 ppm/V Typ
Storage Temperature Range	-40°C to 105°C
Phase Noise(Typ,10MHz,AT-cut)	-115 dBc/Hz @10Hz, -135 dBc/Hz @100Hz -150 dBc/Hz @1KHz, -155 dBc/Hz @10KHz
G-Sensitivity	± 0.002 ppm/G, Worst direction
Input Voltage (Vcc)	A = +5 VDC $\pm 5\%$; T = +12 VDC $\pm 5\%$; U = +15 VDC $\pm 5\%$
Input Current (Max)	Steady state: 200 mA / 120 mA for Vcc = 5V / 12V at 25°C Start-up: 500 mA / 250 mA for Vcc = 5V / 12V
Output Load	15 pF
Warm-up Time	3 minutes Maximum, to ± 0.1 ppm accuracy
Output Waveform	HCMOS compatible square wave; 40/60% Duty cycle
Logic "1" / Logic "0" Level	4.5V / 0.5V Typ
Rise/Fall Time (Tr/Tf)	5 ns Maximum
EFC Range	± 5 ppm/AT-cut, ± 0.7 ppm/SC-cut, with control voltage Vc = 0.5V to 4.5V
Linearity / Slope	$\pm 10\%$ Maximum of best straight line fit / Positive
EFC Input Impedance	100 kOhms Minimum

Creating a Part Number

OC25C-12M800-A 50 D V (Not all combinations are available. Consult factory)

Product Series	OC25C	EFC option or blank	
Frequency	12M	Operating Temperature Range: A = 0 to 70°C	
Supply Voltage: A = 5.0V	A	Frequency Stability: B = -40 to 85°C	
T = 12V	T	D = -20 to 70°C	
U = 15V	U	X = Customized Temp Range	
	50	50 = ± 50 ppb	
	100	100 = ± 100 ppb	
	500	500 = ± 500 ppb	

OUTLINE DRAWING

