



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

### FEATURES

- RoHS Compliant, 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

<b>Frequency Stability vs. Temp</b>	50 = $\pm 50$ ppb; 100 = $\pm 100$ ppb; 500 = $\pm 500$ ppb
<b>Temperature Range</b>	A = 0°C to 70°C; B = -40°C to 85°C; D = -20°C to 70°C
<b>Aging (after 30 days)</b>	1E-7 first year, at 10MHz AT-cut
<b>Initial Tolerance</b>	$\pm 0.05$ ppm Typ, at 25°C, $V_c = 1/2 V_{cc}$
<b>Frequency vs. Load</b>	$\pm 0.02$ ppm Typ / $\pm 5\%$ load change
<b>Frequency vs. Voltage</b>	$\pm 0.02$ ppm/V Typ
<b>Storage Temperature Range</b>	-40°C to 105°C
<b>Phase Noise(Typ,10MHz,AT-cut)</b>	-115 dBc/Hz @10Hz, -135 dBc/Hz @100Hz -150 dBc/Hz @1KHz, -155 dBc/Hz @10KHz
<b>G-Sensitivity</b>	$\pm 0.002$ ppm/G, Worst direction
<b>Input Voltage (Vcc)</b>	A = +5 VDC $\pm 5\%$ ; B = +3.3 VDC $\pm 5\%$ ; T = +12 VDC $\pm 5\%$ ; U = +15 VDC $\pm 5\%$
<b>Input Current (Max)</b>	Steady state: 200 mA / 120 mA for $V_{cc} = 5V / 12V$ at 25°C Start-up: 500 mA / 250 mA for $V_{cc} = 5V / 12V$
<b>Output Load</b>	15 pF
<b>Warm-up Time</b>	3 minutes Maximum, to $\pm 0.1$ ppm accuracy
<b>Output Waveform</b>	HCMOS compatible square wave; 40/60% Duty cycle
<b>Logic "1" / Logic "0" Level</b>	4.5V / 0.5V Typ
<b>Rise/Fall Time (Tr/Tf)</b>	5 ns Maximum
<b>EFC Range</b>	$\pm 5$ ppm/AT-cut, $\pm 0.7$ ppm/SC-cut, with control voltage $V_c = 0.5V$ to 4.5V
<b>Linearity / Slope</b>	$\pm 10\%$ Maximum of best straight line fit / Positive
<b>EFC Input Impedance</b>	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		Frequency Stability:	B = -40 to 85°C
T = 12V		50 = $\pm 50$ ppb	D = -20 to 70°C
U = 15V		100 = $\pm 100$ ppb	X = Customized Temp Range
		500 = $\pm 500$ ppb	

### OUTLINE DRAWING

