



Crystal Oscillators > 130 to 650 MHz > VHF Ultra Low Noise OCXO Plus Multiplier

**Features:**

- Lowest Phase Noise Available at Frequencies from 130 to Above 500 MHz
- Internal Voltage Regulator and Oven
- Integral x2, x4 and Odd-Order Multipliers

**Applications:**

- Radar Systems
- High Energy Physics
- Radio Astronomy
- Test Equipment
- Synthesizers



The VHF Ultra Low Noise Plus Multiplier creates higher frequency signals with state-of-the-art phase noise performance. The included x2 and x4 multipliers use NIST diode doubler technology. The odd-order multiplier can be specified at x3 and x5 and provides 20 log(N) phase noise performance.

Typical Specifications:						
Frequency (Specify)		130 to 650 MHz				
Frequency	100 x 2	200 MHz	100 x 4	400 MHz	MHz	
Output Level	+13				dBm	
Aging	±5 x 10 <sup>-7</sup> to ±2 x 10 <sup>-7</sup> / year					
Phase Noise	100 Hz	-119	-126	-113	-118	dBc/Hz
	1 kHz	-145	-152	-138	-146	dBc/Hz
	10 kHz	-168	-170	-162	-164	dBc/Hz
	20 kHz	-168	-170	-162	-164	dBc/Hz
	Temperature Stability (Specify)					
Range A	0 to +50C				±1 x 10 <sup>-6</sup> to ±2 x 10 <sup>-7</sup>	
Range B	0 to +65C					
Range C	0 to +70C					
Range D	-20 to +70C					
Range E	-40 to +70C					
Sub-Harmonics	<-40				dBc	
Electrical Tuning Range (Specify)						
Tuning A	0 to +10 VDC				±2 x 10 <sup>-7</sup> to ±4 x 10 <sup>-6</sup>	
Tuning B	±5 VDC					
Supply Voltage (Specify)	+12 or +15				VDC	
Warm-up Power	5		6		Watts	
Total Power typical	3				Watts	
Crystal Type	SC					
Dimensions	44.4 x 74.7 x 25.4				mm	
	1.75 x 2.94 x 1				inches	
Connectors	SMA on side and solder pins on base					

