

PHASE LOCKED OSCILLATOR, EXTERNAL REFERENCE

8500 Series - .75 GHz to 6.0 GHz
8510 Series - 6.0 GHz to 18.0 GHz

TECHNICAL FEATURE

FEATURES

- Low Noise, Dielectric Resonator Oscillator (DRO) or Coaxial Resonator Oscillator (CRO)
- Analog phase-locked loop using a high performance sampling phase detector
- Internal voltage regulator
- High stability, low noise crystal reference oscillator
- Commercial designs for low cost applications

Frequency Coverage	.75 GHz to 18.0 GHz
Power Output	+10 dBm nominal
Harmonics	-25 dBc, maximum
Spurious	-70 dBc, maximum
Frequency Stability	Same as external reference
Phase Noise	Reference noise plus 20 log (N) + 3dB (Note 1)
Lock Alarm	TTL or Open Collector
DC Power	+15 Volts @ 350 mA (max)
Temperature Range	-20°C to +70°C
RF Connectors	SMA Female
DC Connectors	Feedthru
Dimensions	8500 Series: 2.75" x 2.75" x 0.75" 8510 Series: 2.25" x 2.25" x 0.625"
EXTERNAL REFERENCE INPUT	
Frequency Range	100 MHz nominal (Note 2)
Power Input	0 dBm nominal
Input Impedance	50 Ohms

Notes:

1. Where "(N)" equals output frequency divided by input frequency. Formula valid except $\pm$ decade of LBW it is typically 20 log N + 6 dB to 10 dB.
2. Depending on final multiplication required, reference frequency may vary from 5 MHz to 300 MHz.
3. Improved performance available – consult your factory representative.