



Crystal Oscillators > Phase Locked Crystal Oscillators> 5 & 100 MHz Phase Locked

Features:

- Phase Lockable
- 5 & 100 MHz Standards
- Low Loop Bandwidth
<1 Hz Available
- Phase Noise Cleanup

Applications:

- Up-Down Converters
- System Synchronization
- Test Equipment
- GPS Cleanup



The 5 & 100 Mhz PLO includes two high performance SC-Cut crystal oscillators, ensuring optimal phase noise during locked and unlocked conditions. The 100 Mhz phase noise below 100 Hz can be significantly improved utilizing a sub 100 Hz loop bandwidth in the phase lock loop. The unit also incorporates independent ovens to ensure excellent short-term stability.

| Typical Specifications: | | | |
|--|-------------------------------------|-------------|--------|
| Frequency | 5 & 100 MHz Phase Locked Oscillator | | |
| Input Frequency: | 5 MHz, +5 to +12 dBm | | |
| Output Frequency | 5 MHz | 100 MHz | |
| Output Level | +10 +/- 2 dB | +10 +/- 2dB | dBm |
| Aging | | | |
| Per day after 30 days operating, typical | ±3e-10 | ±3e-10 | |
| Phase Noise | | | |
| 1 Hz | -110 | | dBc/Hz |
| 10 Hz | -140 | -115 | dBc/Hz |
| 100 Hz | -150 | -125 | dBc/Hz |
| 1 kHz | -160 | -150 | dBc/Hz |
| 10 kHz | -165 | -170 | dBc/Hz |
| Loop Bandwidth, Typ. | 40 Hz | | |
| Temperature Stability (Specify) | | | |
| Range A | 0 to +50C | ±1e-8 | |
| Range B | 0 to +65C | ±2e-8 | |
| Range C | 0 to +70C | ±2e-8 | |
| Range D | -20 to +70C | ±5e-8 | |
| Spurious, Sub-Harmonics | -85 | | dBc |
| Harmonics | -30 | | dBc |
| Electrical Tuning (Specify) | | | |
| Tuning A | 0 to +10 VDC | ±1e-6 | |
| Supply Voltage (Specify) | +12 +/- .5 | | VDC |
| Total Power @ 25 °C | 6 | | Watts |
| Crystal Type | SC | | |
| Dimensions | 63.5 x 152.4 x 22.86 | mm | |
| | 2.5 x 6.0 x 0.9 | inches | |
| Connectors | SMA's, D- Submini., male | | |

