

FEATURE

- Wide Operating Temperature Range
- Temp: -40 to +80°C Standard
- Ultra Low Phase-Noise
- Small Size, Low Power Consumption
- Low Cost, Low Profile



APPLICATION

- Radar System
- Electronic warfare
- Communication system
- Test equipment

DESCRIPTION

The Meuro series PDRO, Phase Locked Dielectric Resonator Oscillators, have been designed for use in Commercial and Military communication systems where demanding high performance, high reliability and cost are critical. The series PDRO take advantage of the small size, low phase-noise and high efficiency offered by fundamental GaAs MESFET and BJT DROs when they are phase-locked to an external crystal oscillator in the 50 MHz to 300 MHz range. Features such as ultra-low- phase noise, high power, small size and low cost make Meuro's PDRO product line the best value on the market today for your Commercial or Military applications.

SPECIFICATIONS: (@+25

| Parameter | Internal Reference |
|------------------------------------|----------------------------------|
| Typical Performance Specifications | |
| Output Frequency Range | 0.5 GHz to 32 GHz |
| Output Power | +15 dBm (Type) |
| Power Variation | ±2 dBm |
| Output Impedance | 50Ω |
| Load VSWR | 1.5:1 |
| Supply Voltage* | +12 ---- +15 VDC |
| Current(Type) | 350 mA Steady State,800 mA Surge |
| Spurious | -80 dBc |
| Harmonics | -20 dBc |
| Phase Noise | See Table |
| Alarm | TTL High in Lock |
| External Reference Frequency | N/A |
| Input Power Level | N/A |
| Frequency Stability | ±2.5 ppm |
| Connections | SMA(F) |
| RF Output Reference | SMA(F) |
| Input | SMA(F) |
| Reference onitor | Feed thru |
| Alarm | Feed thru |
| Supply Voltage | Solder Lug |
| Ground | N/A |
| Operating Temperature | -40 to +80°C |



PHASE LOCKED RESONATOR OSCILLATOR

| Frequency Offset from Carrier (@Hz) | Phase Noise (dBc/Hz)@5 GHz | Phase Noise (dBc/Hz)@10 GHz | Phase Noise (dBc/Hz)@14 GHz | Phase Noise (dBc/Hz)@22 GHz |
|---|----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Typical Phase Noise For Internal Reference Units | | | | |
| 100 | -80 | -75 | -72 | -75 |
| 1K | -105 | -100 | -97 | -97 |
| 10K | -120 | -110 | -107 | -107 |
| 100K | -123 | -115 | -110 | -109 |
| 1M | -135 | -128 | -125 | -120 |
| 10M | -145 | -140 | -140 | -140 |

HOW TO ORDER

Specify Part Number

PLDRO - FF - PP - I-C

Center Frequency (MHz)

Output Power (dBm)

Example: To order a 12GHz interference PLDRO with output power of 15dBm, specify PLDRO-12000-15-I-C

OUTLINE (mm)

