



FREE RUN OSCILLATOR(FRDRO)

FEATURE

- Wide Operating Temperature Range
- Temp: -40 to +80°C Standard
- Internal voltage regulated
- Excellent frequency stability
- Low Phase-Noise
- Low cost and reliable construction



APPLICATION

- Frequency reference
- Local oscillators
- Communication systems
- Radar systems

DESCRIPTION:

The Meuro series DRO cover the frequency range of 2 to 15 GHz. The oscillators utilize state of the art MIC and FET devices technology to provide highly stable, reliable and clean signal sources. Each oscillator has an internal voltage regulator to provide regulated bias and over-voltage protection. An internal isolator may be integrated in to improve the anti-load pulling ability. Standard products incorporate a screw tuner with a reliable self-locking feature to provide small mechanical frequency tuning. SMA female coaxial connector is equipped for standard RF interface.

SPECIFICATIONS:(@+25

| Parameter | 2-5GHz | 5-8GHz | 8-10GHz | 10-12GHz | 12-15GHz |
|---|----------------|----------------|----------------|----------------|----------------|
| Typical Performance Specifications | | | | | |
| Output Power | 10-20dBm | 10-20dBm | 10-20dBm | 10-20dBm | 10-20dBm |
| Mechanical Tuning(Type) | ±25MHz | ±50MHz | ±80MHz | ±80MHz | ±80MHz |
| Frequency Stability | ±3ppm/°C | ±3 ppm/°C | ±3 ppm/ | ±3 ppm/°C | ±3 ppm/°C |
| Power Vibratio(max) | ±2dBm | ±2dBm | ±2dBm°C | ±2dBm | ±2dBm |
| Phase Noise@10KHz offset | -95dBc/Hz | -90dBc/Hz | -90dBc/Hz | -85dBc/ | -85dBc/Hz |
| Phase Noise@100KHz offset | -120dBc/Hz | -115dBc/Hz | -115dBc/Hz | -110dBc/HzHz | -110dBc/Hz |
| Harmonics(max) | -20 dBc | -20 dBc | -20 dBc | -20 dB | -20 dBc |
| Spurious(max) | -70 dBc | -70 dBc | -70 dBc | -70 dBcc | -70 dBc |
| Bias Voltage | +12VDC | +12VDC | +12VDC | +12VDC | +12VDC |
| Bias Current | 180-280 mA | 60-120 mA | 60-120 mA | 60-120 mA | 60-150 mA |
| RF Connections | SMA-F | SMA-F | SMA-F | SMA-F | SMA-F |
| Operating Temperature | -40°C to +80°C | -40°C to +80°C | -40°C to +80°C | -40°C to +80°C | -40°C to +80°C |
| Outline | RD1A | RD2A/RD2B | RD3A/RD3B | RD4A/RD4B | RD5A/RD5B |

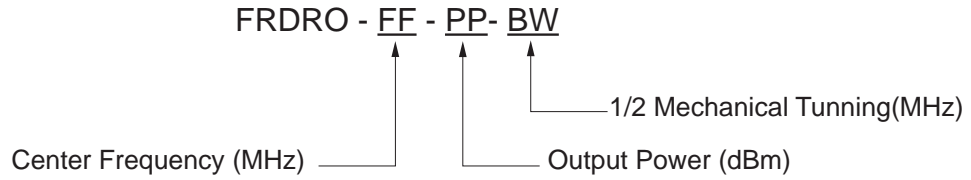
Note: Higher Output Frequency to 30 GHz is available (multiplied)



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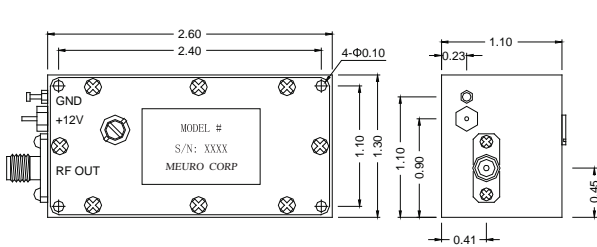
HOW TO ORDER

Specify Part Number

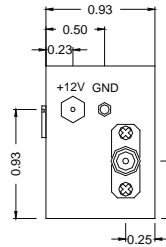


Example: To order a 12GHz FRDRO output power 15dBm with 100MHz mechanical tuning frequency, specify FRDRO-12000-15-50

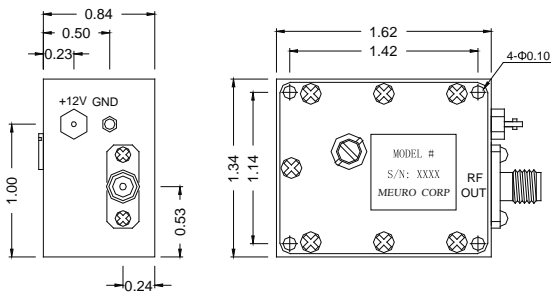
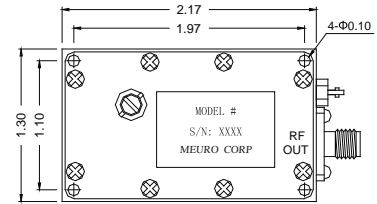
OUTLINE (inch)



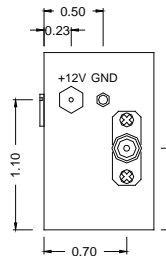
RD1A (10&20dBm)



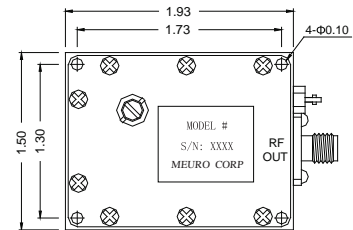
RD2B (20dBm)



RD3A (10dBm)

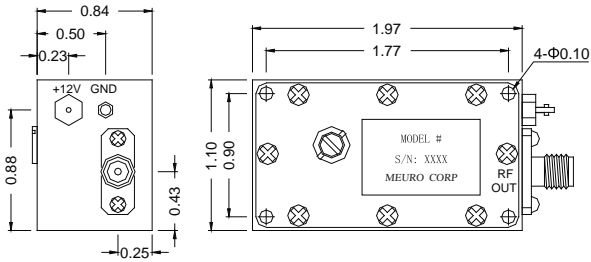


RD2A (10dBm)

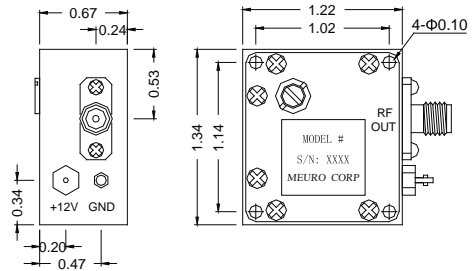




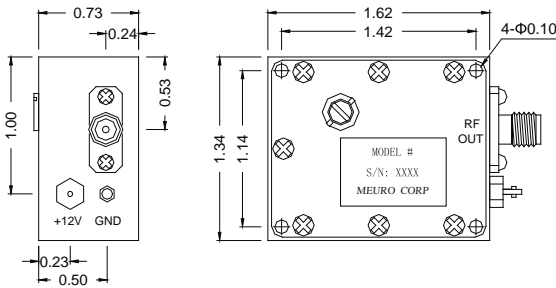
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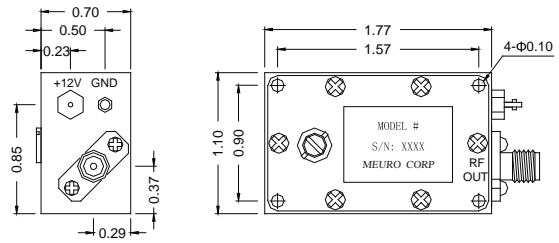
RD3B (20dBm)



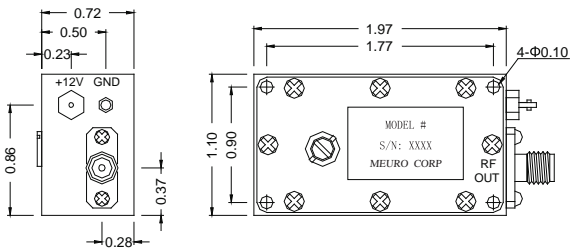
RD5A (10dBm)



RD4A (10dBm)



RD5B (20dBm)



RD4B (20dBm)

Meuro reserve the right to change the specifications without notice