

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 Positron 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°C)

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	±3 ppm/°C	±3 ppm/°C	±3 ppm/°C	±3 ppm/°C	±3 ppm/°C
Power Vibration(max)	±2dBm	±2dBm	±2dBm	±2dBm	±2dBm
Phase Noise@10KHz offset	-95dBc/Hz	-90dBc/Hz	-90dBc/Hz	-85dBc/Hz	-85dBc/Hz
Phase Noise@100KHz offset	-120dBc/Hz	-115dBc/Hz	-115dBc/Hz	-110dBc/Hz	-110dBc/Hz
Harmonics(Max)	-20 dBc	-20 dBc	-20 dBc	-20 dBc	-20 dBc
Spurious(Max)	-70 dBc	-70 dBc	-70 dBc	-70 dBc	-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

FRDRO - FF - PP - BW

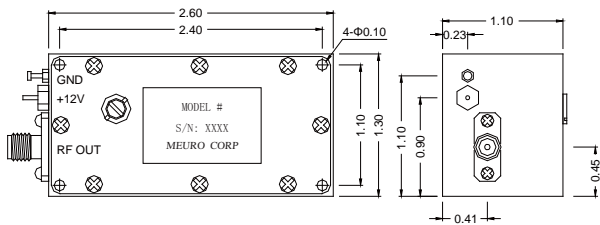
Center Frequency (MHz)

Output Power (dBm)

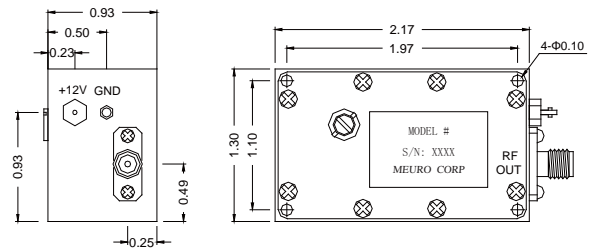
1/2 Mechanical Tuning(MHz)

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

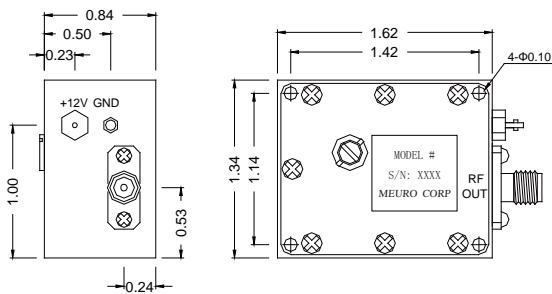
OUTLINE (inch)



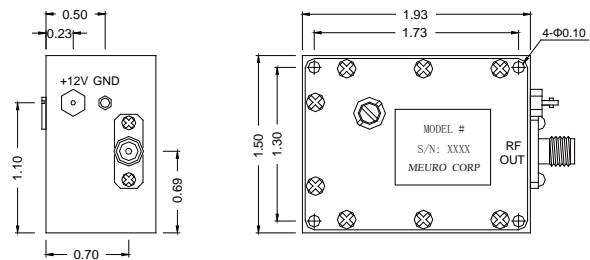
RD1A (10&20dBm)



RD2B (20dBm)



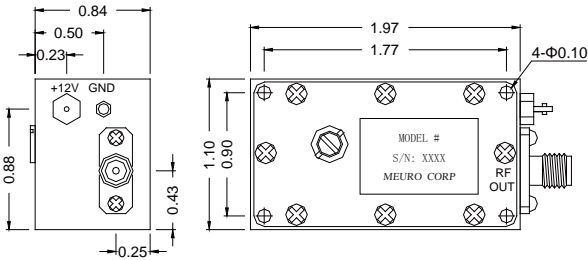
RD3A (10dBm)



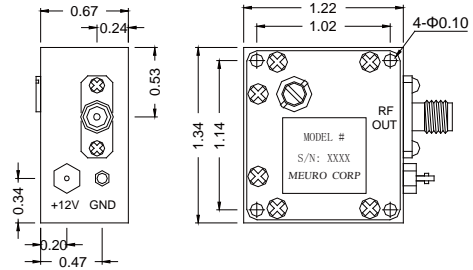
RD2A (10dBm)



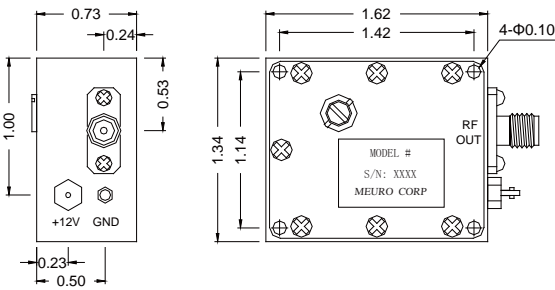
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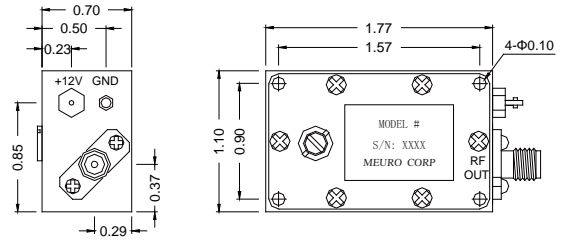
RD3B (20dBm)



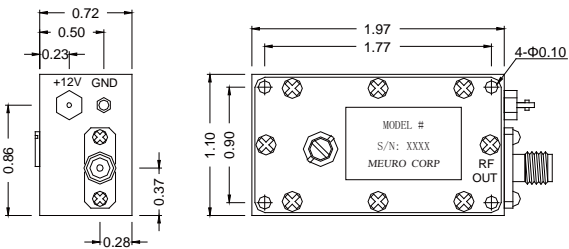
RD5A (10dBm)



RD4A (10dBm)



RD5B (20dBm)



RD4B (20dBm)

Meuro reserve the right to change the specifications without notice