Model 2098-007 Frequency Source

The Model 2098-007 Frequency Source is a 70 MHz, synthesized frequency generator.

**EQUIPMENT DESCRIPTION**

The 70.000 MHz signal is generated by the VCO controlled by the Phase Lock Loop circuit which is referenced to a 25 MHz Crystal oscillator. The 70 MHz is applied to an amplifier and then to the output switch/attenuator providing a level of 0.0 dBm (high) or -15 dBm (low). A green LED indicates the presence of DC power. Power is provided by a wall transformer for 115 VAC, 60Hz and provides +15 VDC at 150 mA. The Option -P4 wall power supply covers 90-260 VAC, 47-63 Hz. Specify US, EUR, AUS or UK plug for the -P4 option. The connector is BNC female for the 70 MHz output and the impedance is 75 ohms.

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**2098-007 Frequency Source Block Diagram and Chassis**

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**EQUIPMENT SPECIFICATIONS**

**Output Characteristics**
- Impedance: 75 Ω
- Return Loss: >15 dB
- Frequency: 70.000 ± 0.0005 MHz
- Level: 0.0 dBm ±0.5 dB (high level); -15 dBm ± 0.5 dB (low level)
- Harmonics: < -30 dB, max, -35 dB for second and third, <-50 dB for all others
- Spurious: < -60 dB, max

**Synthesizer Characteristics**
- Frequency Accuracy: ± 0.5 kHz max. over time and temperature, ± 0.25 kHz, typical
- Phase Noise (dBc/Hz): ≤ -100, 10 kHz; ≤ -120, 100 kHz; ≤ -130, 1 MHz
- Frequency Selection: NONE: Fixed tuned

**Controls/Indicators**
- Level Select: Slide switch selects High (0 dBm) or Low (-15 dBm) level
- DC Power: Green LED

**Other**
- RF Output Connector: BNC, female
- Size (W x H x D): 3.3 x 1.2 x 4.0 (in.); 83.8 x 30.5 x 101.6 (mm)
- Power: Wall power supply is for 115 VAC, 60Hz and provides +15 VDC, 150 mA
- Option -P4 covers 100-240 ± 10% VAC, 47-63 Hz. Specify US, EUR, AUS or UK plug

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*+10 to +40 degrees C; 2000 meters max elevation; 80% max humidity; Pollution Degree 2; Specifications subject to change without notice*