

DATA SHEET

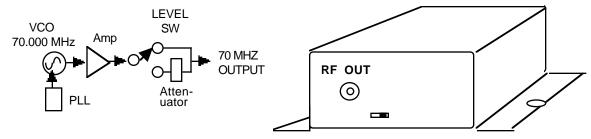
Rev. 0 1/21/03

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.



2098-007 Frequency Source Block Diagram and Chassis

EQUIPMENT SPECIFICATIONS*

Output Characteristics

 $\begin{array}{ll} \text{Impedance} & 75 \ \Omega \\ \text{Return Loss} & > 15 \ \text{dB} \end{array}$

Frequency $70.000 \pm 0.0005 \text{ MHz}$

Level 0.0 dBm \pm 0.5 dB(high level); -15 dBm \pm 0.5 dB(low level)

Harmonics < -30 dBC, max, -35 dBC typ for second and third, <-50 dBC for all others

Spurious < -60 dBC, 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 covers100-240± 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