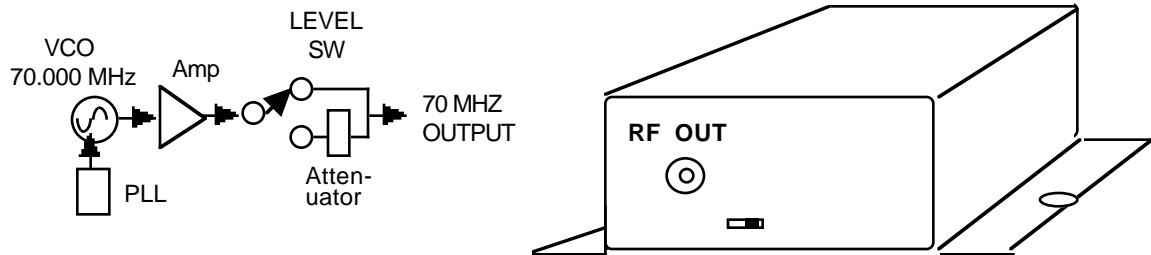


## Model 2098-007 Frequency Source

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**

Impedance	75 $\Omega$
Return Loss	>15 dB
Frequency	70.000 $\pm$ 0.0005 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	$\pm$ 0.5 kHz max. over time and temperature, $\pm$ 0.25 kHz, typical
Phase Noise (dBC/Hz)	$\leq$ -100, 10 kHz; $\leq$ -120, 100 kHz; $\leq$ -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
<b>option -P4</b>	covers 100-240 $\pm$ 10% VAC, 47-63 Hz. Specify US, EUR, AUS or UK plug

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

