



**DATA SHEET**  
**PRELIMINARY** 1/13/05

**2099-10 10 MHz Reference**

**2099-10 10 MHz Reference** - Provides two 10 MHz outputs from a 0.01 ppm high stability oven controlled crystal oscillator. Front panel LEDs provide indication of DC power and oven warm-up. The level is +9 dBm and the 2099-10 works into either a 75 or 50 ohm load. Connectors are BNC female A relay contact closure or open indicates when the oscillator oven is stabilized. Powered by a 90-260 VAC power supply; 1 3/4" X 19" X 14" rack mount chassis.



**2099-10 10 MHz Source**

**EQUIPMENT SPECIFICATIONS\***

**Output Characteristics**

Number of outputs	2,
Impedance	50 or 75
Return Loss	>18 dB
Frequency	10.0000 MHz
Output Level	+9 ± 1 dBm
Harmonics	< -30 dBC, < -40 typ.
Spurious	< -75 dBC

**Oscillator Stability**

Over temperature	± 0.01 ppm max 0 to +50 degrees C
Aging, per day	± 0.001 ppm
Aging, per year	± 0.1 ppm
Warm up, in 4 minutes	± 0.1 ppm
Warm up, in 1 hour	± 0.01 ppm
Mechanical adjustment	± 1 ppm

**Oscillator Phase Noise**

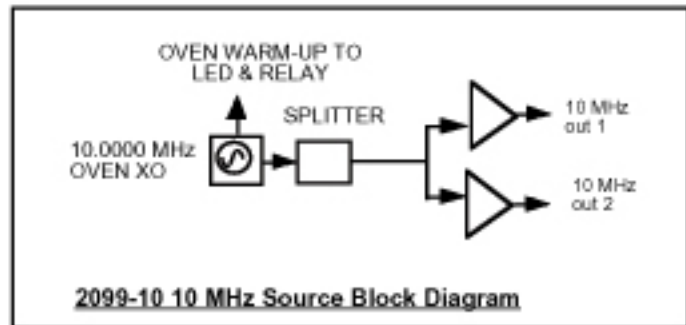
Phase Noise @ F (Hz) >	10	100	1000	10K
dBC/Hz	-110	-140	-155	-160

**Controls, Indicators**

PWR	Green LED
Oven Warm Up	Yellow LED, External contact closure

**Other**

Connector, 10 MHz	BNC, female, 50 and 75 ohms impedance
Connector, Alarm	DB9 - NO or NC contact closure on Alarm
Size	19 inch standard chassis 1.75" high X 14.0" deep
Power	90 - 260 VAC, 47 - 63 Hz, 20 watts max.



\*+10 to +40 degrees C; Specifications subject to change without notice



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