TECHNICAL DATA C E T Division



WATKINS-JOHNSON

237.08

WJ-9040 MVU104 VHF/UHF MULTICOUPLER



FEATURES

- 20 to 1400 MHz Frequency Range
- 7 dB Noise Figure
- · Low Power, Compact Unit
- Optimum Coupling to Up to Four Receivers
- Mountable in Rear of WJ-9040 EFR100 Equipment Frame

DESCRIPTION

The WJ-9040 MVU104 Multicoupler provides optimum coupling between a single antenna and as many as four receivers operating in the 20 to 1400 MHz

frequency range. The multicoupler provides a nominal gain of 2 dB and typically maintains a 7 dB or better noise figure throughout the entire 20 to 1400 MHz frequency range.

Maximum attention has been given to minimizing intermodulation distortion and to achieving high isolation between outputs. A third order point of + 13 dBm, referenced to the input, has been obtained. Typically, 21 dB of isolation is provided between outputs.

The MVU104 is designed for use in the WJ-9040 EFR100 Equipment Frame where the unit fits in the option slot located at the rear of the frame. All power requirements are supplied from the WJ-9040 EPS100A Power Supply also mounted in this same frame.

For Further Information Please Contact: WATKINS-JOHNSON COMPANY

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SPECIFICATIONS

Frequency Range	20 to 1400 MHz One, SMA Female
Number of Outputs	Four, SMA Female
	2 dB ± 1.0 dB
Gain*	20 to 750 MHz: 6 dB typical, 7 dB maximum
Noise Figure	750 to 1400 MHz: 7 dB typical, 8 dB maximum
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Input/Output Impedance	50 Ohms, nominal
Input/Output VSWR	2:1 maximum
Isolation Between Ports	10 10 11 00 10 11
20 to 200 MHz	18 dB minimum, 20 dB typical
200 to 1400 MHz	20 dB minimum, 25 dB typical
Size	3.5 inches (89 mm) high, 4.5 inches (114 mm) wide and 1 inch (25.4 mm) deep
Weight	1 lb. (0.45 kg) approximately
Power Requirements	50 mA at 18.3 V, provided by WJ-9040
	EPS100A Power Supply
Power Consumption	Approximately 1 watt
Operating Temperature Range	0 to 50°C
Reverse Isolation	18 dB minimum
Intermodulation Products	
3rd Order Input Intercept Point	+ 13 dBm
ord Order input intercept rome	T TO CIDIT
*Flatness ± 1.5 dB, Referenced to 750 MHz.	