

Table 1-1. Specifications

SPECIFICATIONS

Frequency Range: 40 MHz to 18 GHz

Maximum Input Power: +15 dBm (31.6 mW)

Frequency Range	Equivalent Directivity	Equivalent Output SWR
40 to 100 MHz	≥ 30 dB	≤ 1.25
0.1 to 1 GHz	≥ 38 dB	≤ 1.25
1 to 2 GHz	≥ 36 dB	≤ 1.25
2 to 4 GHz	≥ 33 dB	≤ 1.25
4 to 8 GHz	≥ 29 dB	≤ 1.25
8 to 12 GHz	≥ 27 dB	≤ 1.27
12 to 18 GHz	≥ 26 dB	≤ 1.52

Input SWR: ≤ 1.92

Frequency Tracking:

Between Incident and Reflected ports: ≤ 3.2 dB

Between Incident and Test ports: ≤ 4.2 dB

(Includes 11664A Detector)

Connectors:

Standard: Type N-Female (Input and Output)

Option 001: Input Type N-Female, Output Type N-Male

Option 002: Input Type N-Female, Output APC-7

Option 003: APC-7 (Input and Output)

Dimensions:

69.9 mm wide X 69.9 mm high X 46.6 mm deep

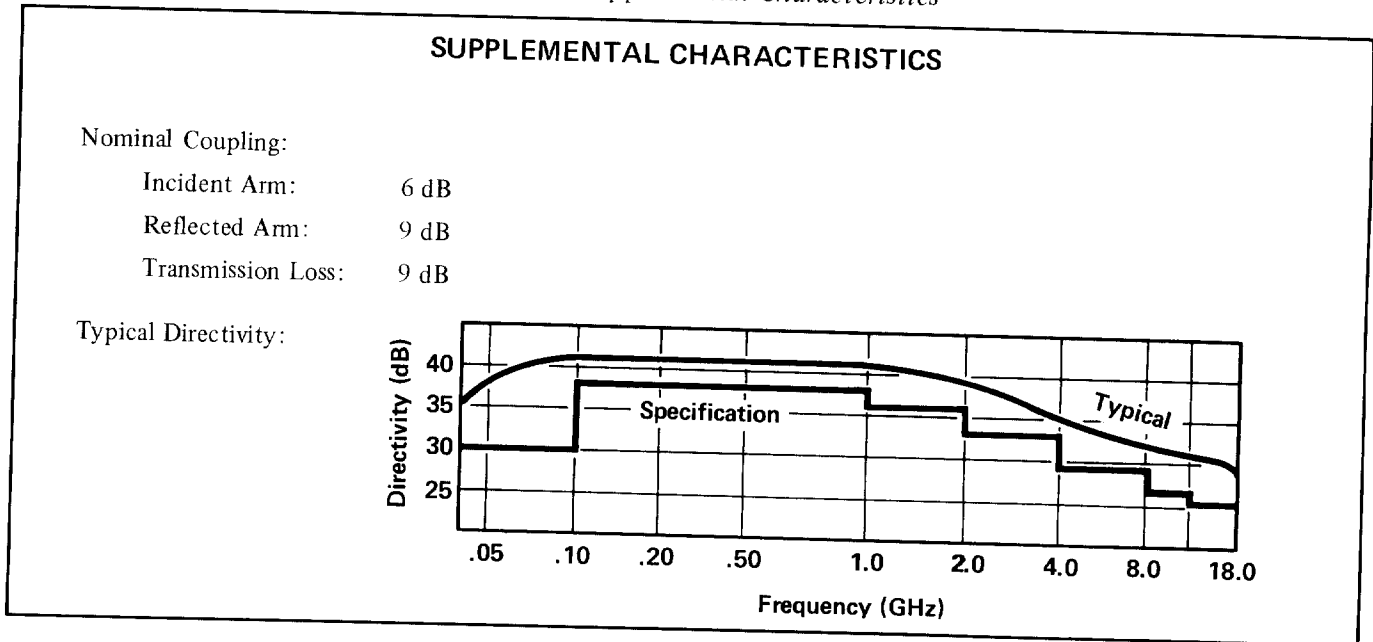
(2.75 inches X 2.75 inches X 1.83 inches)

Cable Length: 1219 mm (48 inches)

Weight: Net, 0.7 kg (1.5 lb.)

Shipping, 2.26 kg (5.13 lb.)

Table 1-2. Supplemental Characteristics



1-16. EQUIPMENT REQUIRED BUT NOT SUPPLIED

1-17. The following equipment is required to operate the 11666A with an HP 8755A:

1. HP Model 8755A Swept Amplitude Analyzer.
2. HP Model 180T-series Oscilloscope main-frame.
3. HP Model 11665B Modulator.
4. HP Model 11664A Detector (Transmission measurements only).
5. Sweep Oscillator, such as HP Model 8620-series.

1-18. Swept Amplitude Analyzer

1-19. The Model 8755A Swept Amplitude Analyzer with the 11666A Reflectometer Bridge, Model 11665B Modulator, and Model 11664A Detector measures amplitude levels of -50 to $+10$ dBm and amplitude ratios of 60 dB over a frequency range of 40 MHz to 18 GHz. The Model 8755A plugs into the Model 180-series oscilloscopes.

1-20. Oscilloscope

1-21. The Model 8755A Swept Amplitude Analyzer must be plugged into a Model 180T-series Oscillo-

scope to be useful. The Model 180 acts as a display indicator and power supply for the Model 8755A.

1-22. Modulator

1-23. The Model 11665B Modulator is designed to be used with the Model 8755A Swept Amplitude Analyzer. The Model 8755A supplies a 27.8 kHz modulating signal to the Model 11665B which then squarewave modulates the RF signal.

1-24. Detector

1-25. A Model 11664A Detector is required for transmission measurements with the 11666A. The detector is used to demodulate the 27.8 kHz modulation signal from the RF signal at the output of the device under test.

1-26. Sweep Oscillator

1-27. Sweep Oscillators are needed to furnish the RF input signal. Either the HP Model 8620-series or Model 8690-series Sweep Oscillators may be used.

1-28. EQUIPMENT AVAILABLE

1-29. The following accessories are available:

Model 11679A: 25-foot Extension Cable

Model 11679B: 200-foot Extension Cable