Table 1. Model 8502A Specifications

SPECIFICATIONS
8502A TRANSMISSION/REFLECTION TEST SET

Frequency Range: 500 kHz to 1.3 GHz

Impedance: 50 ohms

Directivity: ≥40 dB

Frequency Response:

Transmission:

Magnitude: ≤±0.8 dB
** **Phase:** ≤±8°

Reflection:

Magnitude: ≤±1.5 dB from 0.5 to 1300 MHz
Phase: ≤±15° from 0.5 to 1300 MHz

** **Phase:** ≤±10° from 2 to 1300 MHz

Port Match:

Test Port Return Loss*:

≥26 dB (≤1.11 SWR) from 2 to 1300 MHz
≥20 dB (≤1.22 SWR) from 0.5 to 2 MHz

Test Port Open/Short Ratio:

Magnitude: ≤±0.75 dB from 2 to 1000 MHz
Phase: ≤±6° from 2 to 1000 MHz
Magnitude: ≤±0.9 dB from 1000 to 1300 MHz
Phase: ≤±7.5° from 1000 to 1300 MHz
Magnitude: ≤±1.25 dB from 0.5 to 2 MHz
Phase: ≤±10° from 0.5 to 2 MHz

Incident Port Return Loss*:

≥25 dB (≤1.12 SWR) from 2 to 1000 MHz
≥23 dB (≤1.15 SWR) from 0.5 to 1300 MHz

Reflection Port Return Loss*:

≥25 dB (≤1.12 SWR) from 2 to 1000 MHz
≥23 dB (≤1.15 SWR) from 0.5 to 1300 MHz

RF Input Port Return Loss*:

≥23 dB (≤1.15 SWR)

Maximum Operating Level: ≤+20 dBm
TEST port: +26 dBm 30 Vdc Max
RF INPUT port: +30 dBm (1W) 7 Vdc Max
Bias: 30 Vdc 500 mA Max

Damage Level: >1 watt (+30 dBm) CW

Dimensions: 101 mm wide, 61.5mm high, 204mm deep (7-1/2" x 2-7/16" x 8")

Weight:
Net: 1.7 kg (3-3/4 lb.)
Shipping: 3.1 kg (7 lb.)

*Other ports terminated in 50 ohms ±10% tolerance.

**± degrees, specified as deviation from linear phase.

Table 2. Model 8502A Supplemental Characteristics

Test Port Return Loss: Typically 30 dB from 2 to 1300 MHz

Insertion Loss with Attenuator Set to Zero:

Input to Test Port: 13 dB

Input to Incident Port: 19 dB

Input to Reflection Port with Short on Test Port: 19 dB

RF Attenuator Range: 0 to 70 dB in 10-dB steps

DC Bias Input Range: ±30 Vdc, ±200 mA; some degradation in RF specifications from 500 kHz to 100 MHz. 500 mA maximum.

RF Connectors: 50 ohm Type N Female

DC Bias Input Connector: Type BNC Female