Table 1-1. Model 8443A/B Specification

SPECIFICATIONS

NOTE

Numbered specifications coincide with numbered performance tests in Section IV.

TRACKING GENERATOR

- Frequency Range: 100 kHz to 110 MHz. (Output frequency tracks the 8553/8552 Spectrum Analyzer tuning.)
- 2. Amplitude Range: <-120 dBm to +10 dBm in 10 and 1 dB steps with a continuous 1.2 dB vernier.
- 3. Amplitude Accuracy (flatness): ± 0.5 dB. Output attenuators 10 dB steps ± 0.2 dB, 1 dB steps ± 0.1 dB. Absolute: 0 dBm at 30 MHz ± 0.3 dB.
- **4.** Output Impedance: 50 ohms, AC coupled, reflection coefficient ≤0.09 (1.2 SWR); output <0 dBm.

*COUNTER

Modes:

Marker: Counter reads frequency at marker position on the Spectrum Analyzer Display. Scan Hold: Scan starts at left edge of display and stops at marker. Counter measures frequency continually.

External: Counter measures frequency of signal at counter input.

- 5. Measurement Range: 100 kHz to 110 MHz. Display; 7 digits with 1 digit overrange.
- Resolution (gate time): 1 kHz (1 mS), 100 Hz (10 mS) and 10 Hz (100 mS).
- 7. Accuracy: ±1 count ± time base accuracy.
- 8. Time Base Aging Rate: $<3 \times 10^{-9}$ per day. (0.3 Hz/day) after warmup.
- 9. Time Base Temperature Drift: <3 x 10-8 (3 Hz) variation, 0 to 55 °C.

Function:

Restore Signal: Counter reads frequency of an unknown signal to counter accuracy when marker is placed anywhere on signal response. Typically 15 dB signal-to-noise ratio required for restored operation.

Track Analyzer: RF OUTPUT tracks spectrum analyzer tunging for swept frequency at marker on spectrum analyzer CRT.

External Inputs:

- 10. Counter: 10 kHz to 120 MHz, 50 ohms, -10 dBm minimum, +25 dBm maximum.
- 11. Time Base: 1 MHz, 40 ohms, 1 Vrms minimum.

Auxiliary Outputs:

- 12. Time Base: 1 MHz, 1 V rms nominal.
- 13. Digital Frequency Output: 8,4,2,1, code: positive logic.

GENERAL:

Temperature Range: Operation 0 to 55°C, storage, -40 to +75°C.

Power: 115 V or 230 V, 48-440 Hz, 75 watts. (When the instrument is is in standby power consumption is 30 watts.)

RFI: Meets or exceeds MIL-I-6181D.

DIMENSIONS: $18-3/4 \text{ L} \times 16-3/4 \text{ W} \times 3-7/8 \text{ H}.$

WEIGHT: 24 lbs, 5 oz. (11,02 kg)

* 8443A only