

Table 1-1. 8445B Specifications

SPECIFICATIONS

Frequency Range: Dc to 1.8 GHz Low-Pass Filter.
1.8 to 18 GHz Tracking Filter.

Digital Frequency Readout (Option 003):

Resolution: 1 MHz

Accuracy: 0.01 to 1.0 GHz: ± 6 MHz

1.0 to 4.0 GHz: ± 8 MHz

4.0 to 18.0 GHz: ± 0.2 %

Out-of-Band Rejection: For YIG tuned filter 1 GHz from center of passband > 70 dB.

Limiting Level: $> +5$ dBm (Maximum input level for < 1 dB signal compression).

Burnout Level: $> +20$ dBm.

Hysteresis: < 25 MHz.

Tuning Linearity: $< \pm 10$ MHz.

Insertion Loss:

	Frequency	Insertion Loss (except Option 004)	Insertion Loss Option 004
Low-Pass Filter	Dc — 1.8 GHz @ 2.05 GHz	< 2.5 dB > 50 dB	*
Tracking Filter (YIG)	1.8 — 12 GHz 12 — 18 GHz	< 8 dB < 10 dB	< 7 dB < 8 dB

*Low-Pass Filter deleted with Option 004.

Table 1-2. Typical Operating Characteristics

TYPICAL OPERATING CHARACTERISTICS

Tracking Filter 3 dB Bandwidth: Typically 20-45 MHz.

Tracking Filter Skirt Roll-off: Characteristics of a three-pole filter.

Input VSWR: Typically < 2.0 (1.8 — 18 GHz).

8555A Local Oscillator Emission with Preselector:

Typically < -70 dBm over recommended operating ranges with Spectrum Analyzer input attenuator set to 0 dB. (See Table 3-1.)

Remote Function: YIG filter frequency can be set by externally supplied voltage. Differential input utilized to eliminate ac hum or other common mode signals which may be present on remote drive input cable.

Sensitivity: Nominally +1 volt/GHz (with direction of tuning from low to high frequency).

Settling Time: Typically within 3 MHz of final frequency after 5ms.

Remote Input Connector: BNC female, outer conductor isolated.

Typical Insertion Loss: The following chart shows typical versus specification values of insertion loss. (The typical curve is developed from eleven spot checks. See paragraph 5-15.)

