The 952001-02A R.F. Probe can be used with these older accessories. However, the frequency dependent specifications given in this manual for the use of the 952001-02A R.F. Probe in combination with an accessory apply ONLY to its use with the newer accessories.

1-6. SPECIFICATIONS

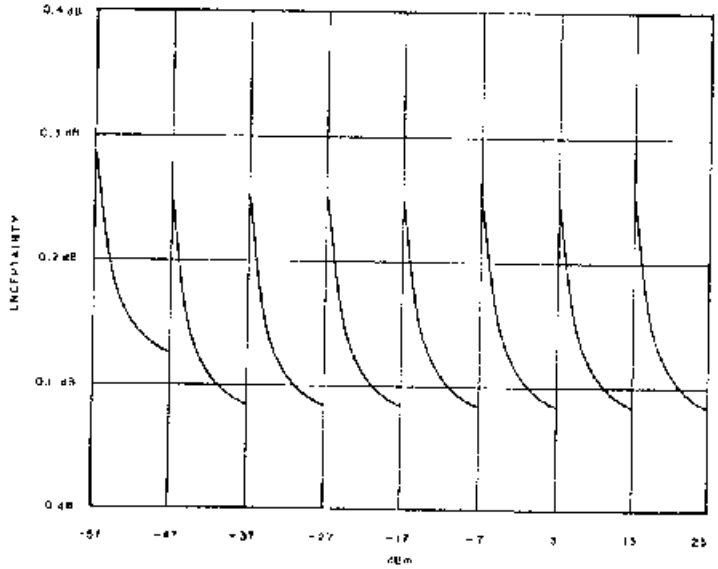
VOLTAGE RANGE:	200 µV to 3 V (300 V up to 700 MHz with accessory 100:1 voltage divider). Lowest detectable voltage is approximately 100 µV.
FULL-SCALE VOLTAGE RANGE:	1, 3, 10, 30, 100, 300, 1000, and 3000 mV.
dBm RANGE:	-61 to +23 dBm (+63 dBm up to 700 MHz with optional accessory, 100:1 Voltage Divider).
FREQUENCY RANGE:	10 kHz to 1.2 GHz (uncalibrated response to approximately 8 GHz).

ACCURACY: The maximum uncertainty is the sum of the uncertainties given in sections A, B, and C.

A1. Basic Uncertainty, Voltage

Voltage Level	mV
200 µV - 3000 mV	1% f.s.

A2. Basic Uncertainty, dBm



§1-6, Continued.

B. Frequency Effect
(50 ohm measurements, using Model 952001-02A Probe with Model 952002-01B BNC Adapter or terminated Model 952003 Type N Tee Adapter.)

Frequency	mV	dBm
1 MHz (Cal. frequency)	0	0
10 kHz - 100 MHz	1% rdg.	0.09 dB
100 MHz - 1 GHz	3% rdg.	0.27 dB
1 GHz - 1.2 GHz	10% rdg.	0.92 dB

S.W.R.: 1.05 to 300 MHz; 1.10 to 1 GHz;
1.15 to 1.2 GHz.

C. Temperature Effect, at 1 MHz.

Temperature Range	mV Ranges		dBm Ranges	
	Instrument	R.F.Probe	Instrument	R.F.Probe
21°C to 25°C	0	0	0	0
18°C to 30°C	0.2% rdg.	1% rdg.	0.02 dB	0.09 dB
10°C to 40°C	0.5% rdg.	5% rdg.	0.04 dB	0.45 dB
0°C to 55°C	1% rdg.	12.5% rdg.	0.09 dB	1.16 dB

METER:

4½-inch taut-band
Two linear voltage scales:
0 to 3; 0.05 per division
0 to 10; 0.1 per division
One logarithmic dBm scale:
-10 to +3; 0.2 per division, max.

METER UNREST:
(1 mV f.s. range, only)

Indicated Voltage	Unrest
Above 600 µV	< 1% f.s.
300 µV to 600 µV	< 2% f.s.
200 µV to 300 µV	< 5% f.s.

R.F.I.: There is no detectable radiated or conducted leakage from the instrument or the probe.

POWER SENSITIVITY: 800 pW, minimum measurable power in 50 ohms. Minimum detectable power in 50 ohms is 200 pW.

WAVEFORM RESPONSE: True r.m.s. response for input levels up to 30 mV (3 volts to 700 MHz using the 100:1 Voltage Divider), with transition to peak-to-peak (calibrated in r.m.s.) at higher levels.

CREST FACTOR: 420 to 1.4, depending upon input level (see Table 1-1).

INPUT IMPEDANCE: See Figures 1-1 and 1-2.

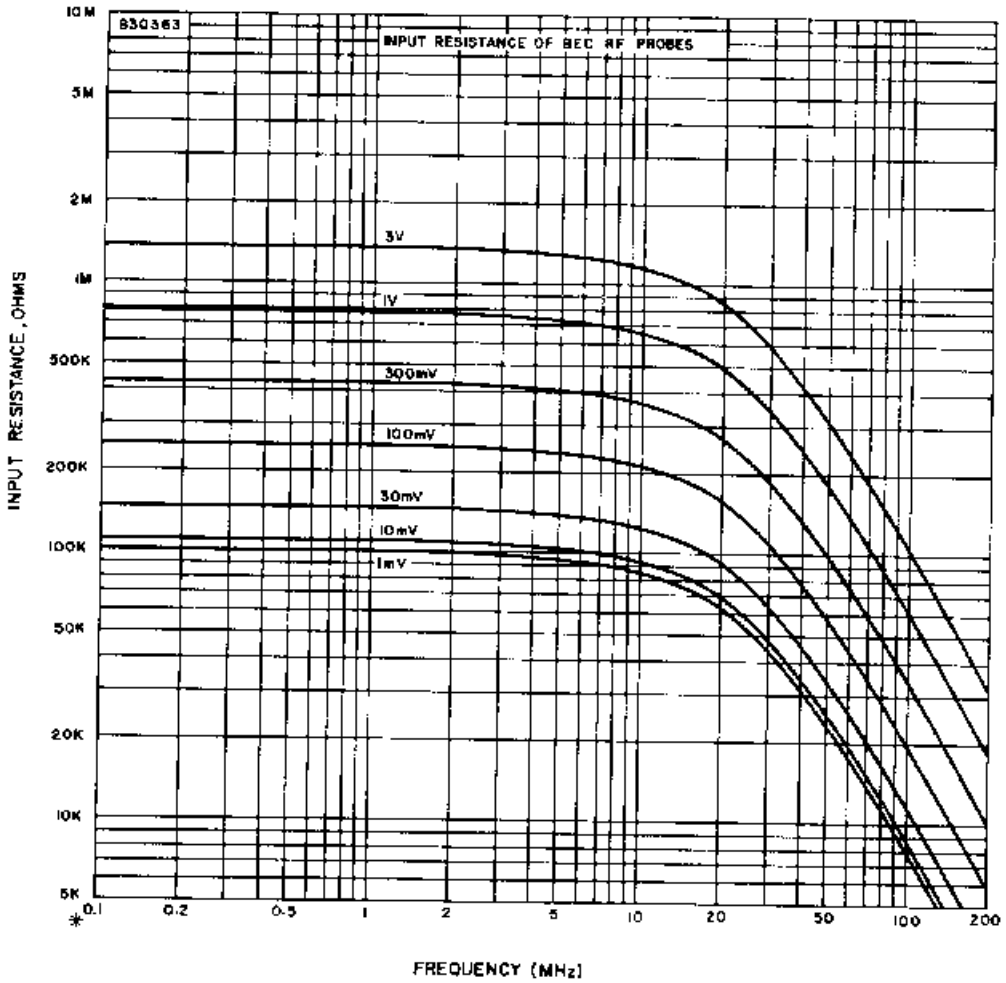
§1-6, Continued.

S.W.R.:	Less than 1.15 to 1.2 GHz (return Loss greater than 23 dB).
D.C. OUTPUT:	0 to 10 V, d.c., proportional to r.f. input voltage. Source resistance of 9 kΩ; will deliver 1 mA into 1 kΩ load. Full-scale input step function response time less than 100 ms on 30 mV, f.s., to 3 V, f.s., ranges, increasing to 1 s on the 1 mV, f.s., range.
WARM UP:	Warm up period typically 1 min. Adjust ZERO on 1 mV range when measuring below 30 mV.
POWER:	100, 120, 220, 240 V ±10%, 50 to 400 Hz.

OPERATING AND STORAGE TEMPERATURES:

A. Operating: 0°C to +55°C
B. Storage: −55°C to +75°C

DIMENSIONS:	132 mm high (without rubber feet) × 211 wide × 292 deep (5.2 in. × 8.3 × 11.5).
WEIGHT:	Net 3.2 kg (7 lbs).



*Curves extend down to 10 kHz without change.

Figure 1-1. Input Resistance of Model 952001-02A R.F. Probe as a Function of Input Level and Frequency

§1-6, Continued.

Table 1-1. Crest Factors

VOLTAGE RANGES (mV)	1	3	10	30	100*	300*	1000*	3000*
CREST FACTOR†	420 to 42	70 to 14	21 to 4.2	7 to 1.4	420 to 42	70 to 14	21 to 4.2	7 to 1.4

*With accessory 100:1 Voltage Divider, Model 952005-01A.

†Maximum permissible ratio of peak-to-r.m.s value of voltage.

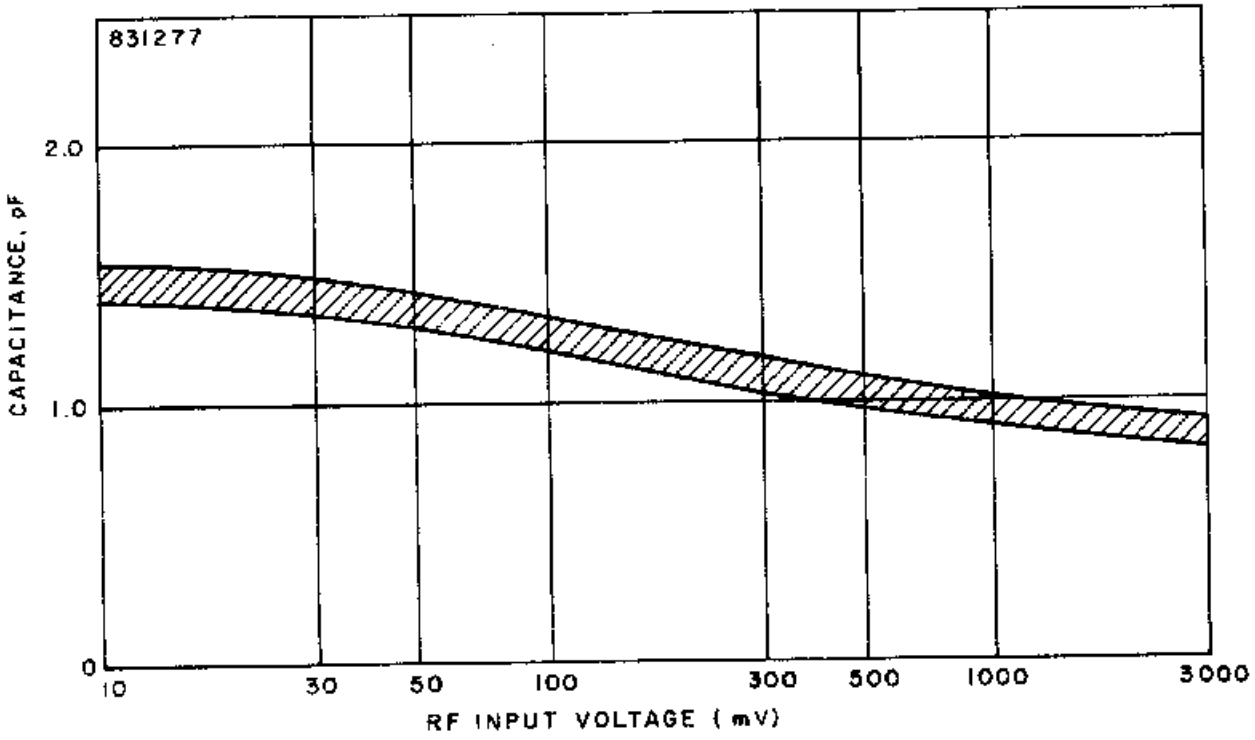


Figure 1-2. Input Capacitance vs. Input Level, Model 952001-02A R.F. Probe