



**TEKTRONIX 067-0625-00
PEAK TO PEAK DETECTOR**

CORRECTION FACTORS AND UNCERTAINTIES

CORRECTION FACTORS

When making measurements use the correction factors provided with the calibration of your peak to peak detector in the following equation to determine the actual change in voltage (ΔV).

$$\Delta V (\%) = \frac{\text{Detector Output (mv)}}{10 \text{ mv}} + \text{Correction Factor (\%)}$$

ΔV : Voltage deviation (%) the generator would deliver to a $50.0 + j0 \Omega$ load.

note: Tests are performed with a floating $2 \text{ M}\Omega$ load across the detector outputs.

Example: After the generator has been adjusted at 50 kHz for 0 mVdc detector output (0.0%), the frequency is changed to 100 MHz. The detector output voltage is now +8 mV, which is equivalent to +0.8% input voltage deviation. If the 100 MHz correction factor is -0.3%, then the actual generator deviation is +0.5% from the 50 kHz reference.

MEASUREMENT UNCERTAINTIES:

0.25%	50 kHz to 10 MHz
0.5%	10 to 30 MHz
0.8%	30 to 100 MHz
1.0%	100 to 250 MHz
3.0%	250 to 500 MHz

note: measurement uncertainties listed are valid only when correction factors are used

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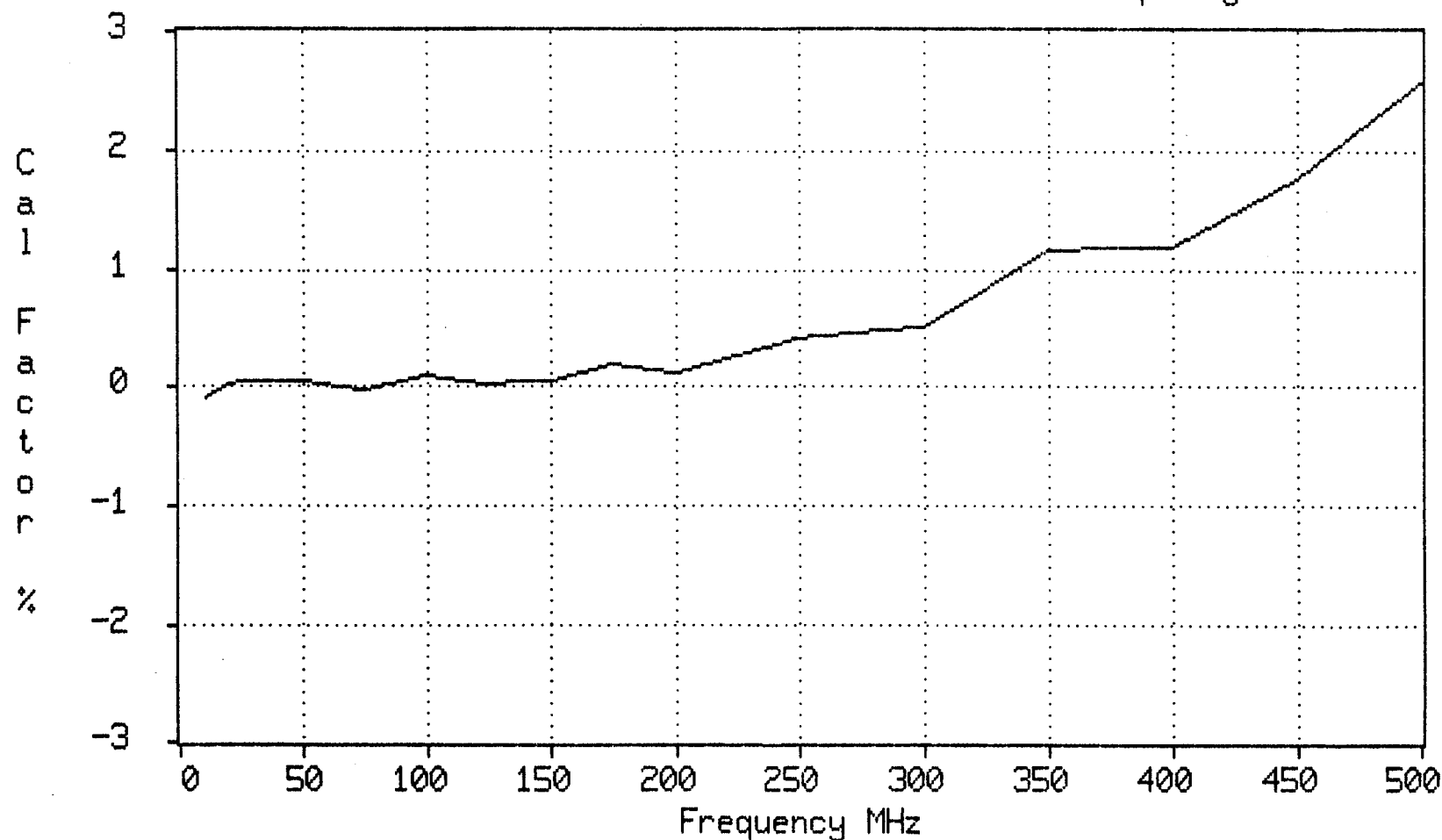
Cal Date: 21-OCT-1998

Serial Number: 116

Technician: LARRY TURNER

Certificate Number: 88162-1

P-P Detector Calibration Factor (%) VS Frequency



1.2V —

CALIBRATION DATA

Scan by Zenith

067-0625-00

Cal Date: 21-OCT-1998

Serial Number: 116

Certificate Number: 88162-1

CORRECTION FACTORS (Flatness) @1.2V P-P (direct input)

Freq MHz	Correction %
10	-0.1
20	+0.0
30	+0.1
50	+0.1
75	-0.0
100	+0.1
125	+0.0
150	+0.1
175	+0.2
200	+0.1
225	+0.3
250	+0.4
300	+0.5
350	+1.2
400	+1.2
450	+1.8
500	+2.6

Interpolate For Frequencies Between Data Points
 Technician: LARRY TURNER