

Free report on
calculate vp vpp and
frequency



**ASSIGN
BUSTER**

3. What is the volts/div setting and the time/div setting after using auto scale?

Answer: Volt/div setting= 1V, time/div= 2 μ s

5. What is the new time/div setting?

Answer= 1, 340 μ s

Answer: Vpp = 4. 71V Vp= 2. 25 V, Frequency= 1/T = 1/1340 = 0. 75 kHz

7. t= 740 μ s, Freq= 1/T =(1/740 μ s) = 1. 6 kHz

8. Vp= 4. 761V

Calculations

Percentage diff for Vpp (V) = $(V_{pp2}-V_{pp1})/V_{pp1} = (4. 76-4. 71)/4. 76 = (0. 05/4. 76) \times 100 = 1. 05\%$

Percentage diff for time (μ s) = $(t_1-t_2)/t_2 = (1340 - 740)/740 = (600/1340) \times 100 = 44. 78\%$

Percentage diff for frequency (kHz) = $(f_2-f_1)/f_1 = (1. 6 - 0. 75)/1. 6 = 53\%$

Questions and Answers

Why is there a percentage difference between the two methods of finding frequency and Vpp?

Answer: This is as a result of the difference in the accuracy of the two methods. The cursors are more accurate than the visual estimates.

What happens to the signal if you make the time/div very small? Very big?

Answer: when the value of the time/div is very small the measured waveform will appear too big and the signal will look like a continuous line. This is because at that point in time the beam sweeps very fast that its motion is

invisible to the eye.

Answer: when the value of the time/div is very big the waveform appears too smooth that the shape will not be seen.