

First Set of Results from Single Sided HPF with CFL-1

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Trace Information

$F_s = 100 \text{ Msa/s}$

$n = 1 \text{ M points}$

$T = 0.01 \text{ sec}$

FFT Size (N) = 1M points

$F = F_s/2 = 50 \text{ MHz}$

$\Delta F = F/N = 50 \text{ M}/1\text{M} = 50\text{Hz}$

Baseline Noise

- Without Probe connected to MDO = 1mV
- With Probe Connected to MDO = 50mV

Termination = 1Mohm

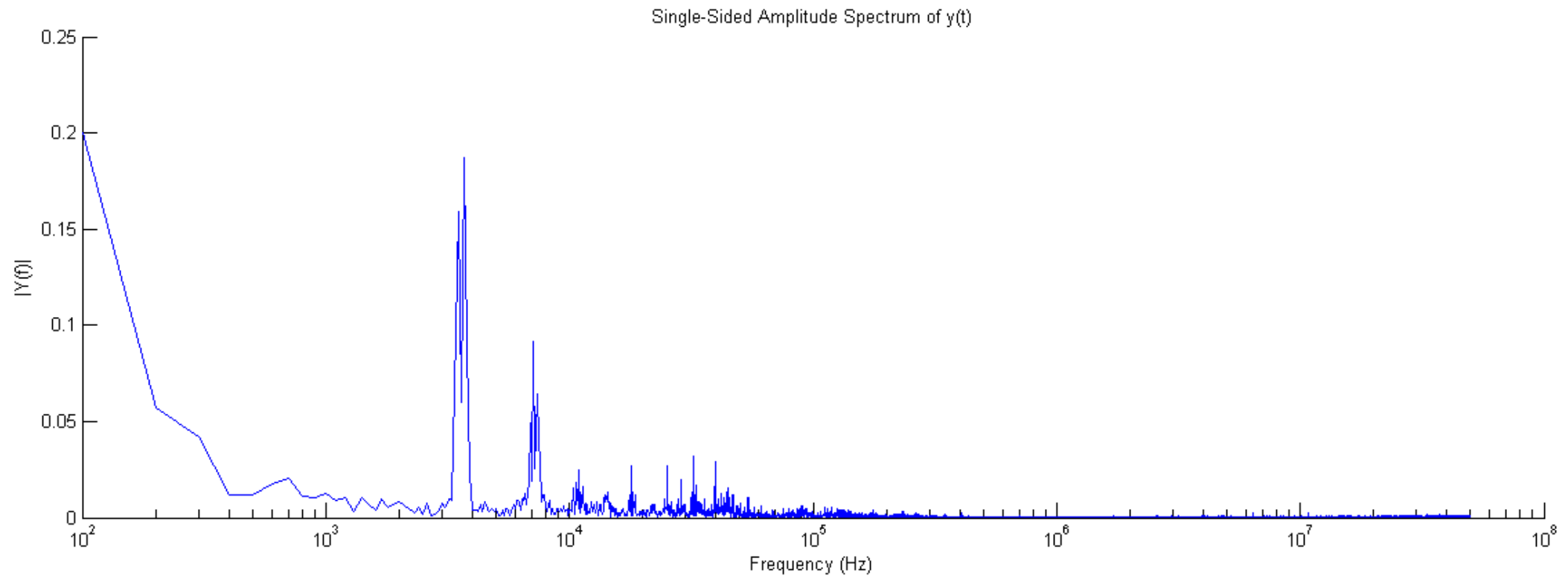
Y div reference setting decides reference of signal amplitude so two settings are used (min amplitude that can be measured is (Ydiv ref)/5).

- Y div = 2V/div
- Y div = 200mV/div

X div reference is 1ms/div but this won't effect sensing as it is decided by F_s and n .

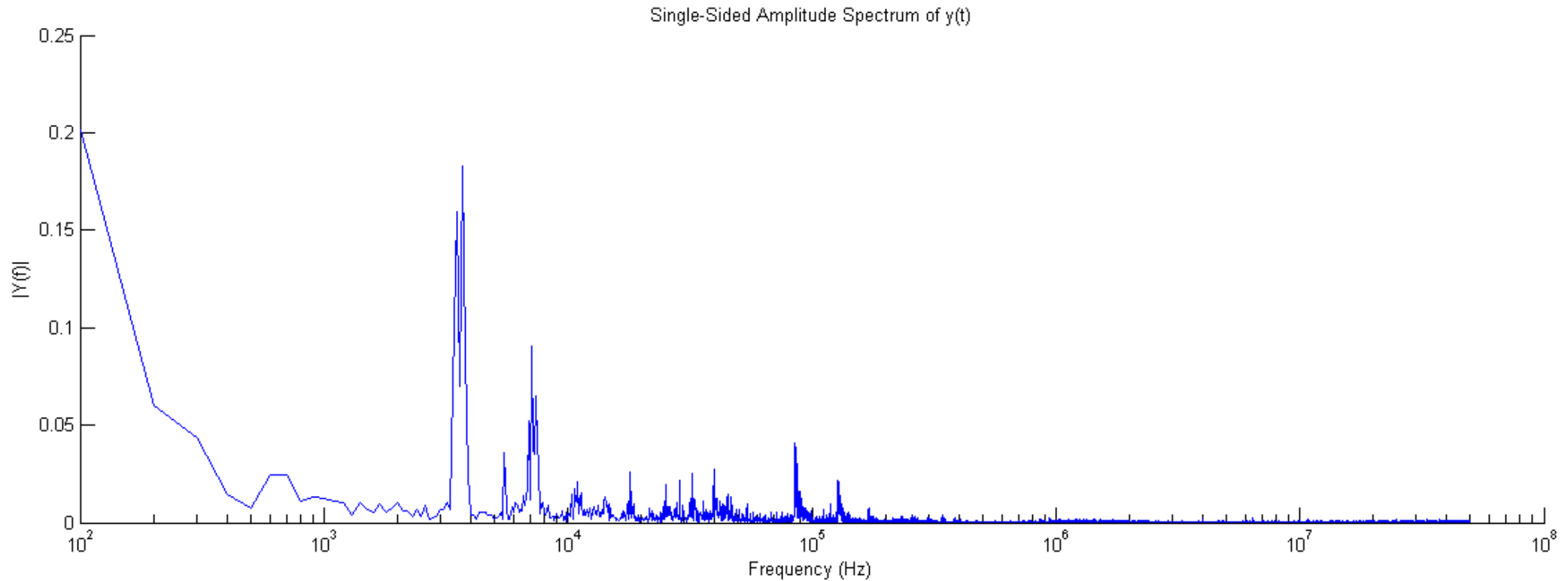
Background Noise (Extension cord) [Parameter : Vphase] Ydiv = 2V/div

Trace: Tek0002RF1



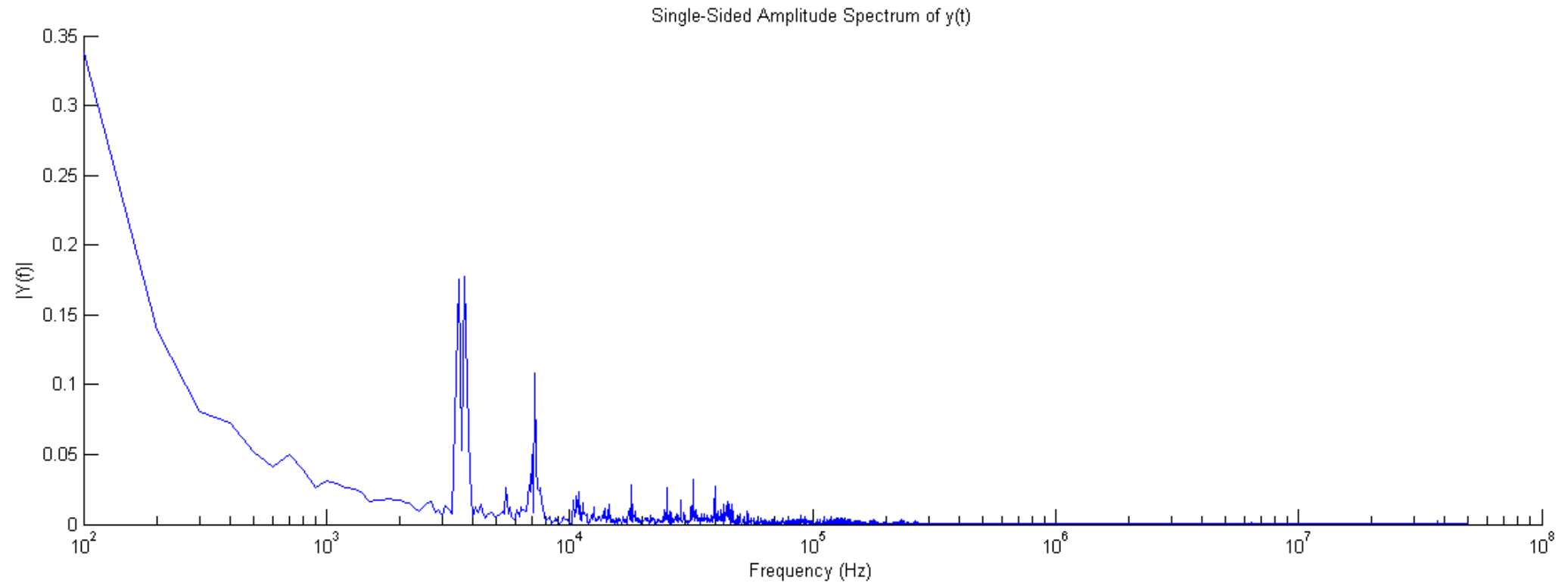
Background Noise + EMI from CFL-1 (Extension cord) [Parameter : Vphase] Ydiv = 2V/div

Trace: Tek0004RF1



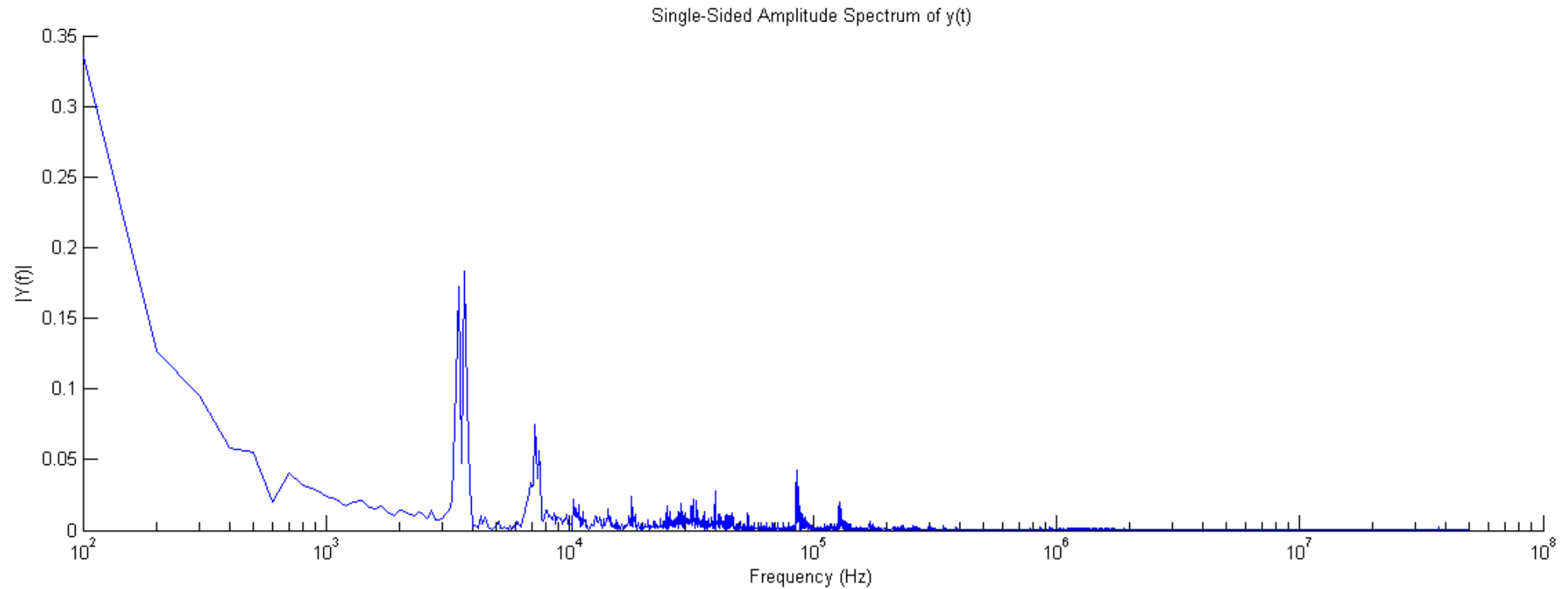
Background Noise (Extension cord) [Parameter : Vphase] Ydiv = 200mV/div

Trace: Tek0003RF1



Background Noise + EMI from CFL-1 (Extension cord) [Parameter : Vphase] Ydiv = 200mV/div

Trace: Tek0005RF1



Tasks Pending

- This is only Vphase data as I was facing issues in dumping of data earlier from MDO (after saving one trace the previous one was stored in physical memory and it was not over written nor removed) but it got resolved yesterday itself. I will be trying Vphase and Vneutral both now.
- Next is to do Vcm and Vdm calculations in matlab.