

Communication Systems Lab

Lab Report (180030037)

Experiment 1 : Frequency Modulation (FM) and Demodulation using Envelope Detection Technique

Frequency Modulation (FM) Technique

Message Signal Parameters

$A_m = 1 \text{ V}$

$F_m = 10 \text{ Hz}$

Carrier Signal Parameters

$A_c = 3 \text{ V}$

$F_c = 100 \text{ Hz}$

Frequency Deviation Value

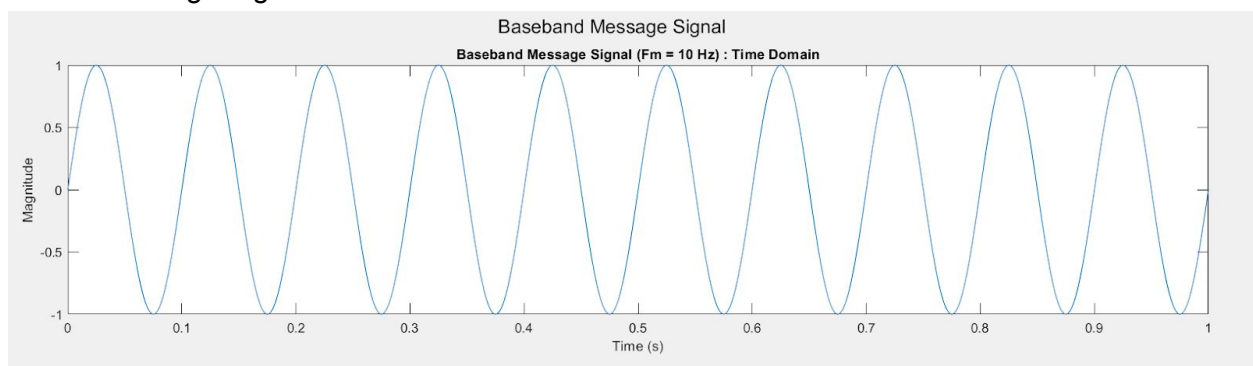
$\text{freqDev} = 50 \text{ Hz}$

Sampling Parameters

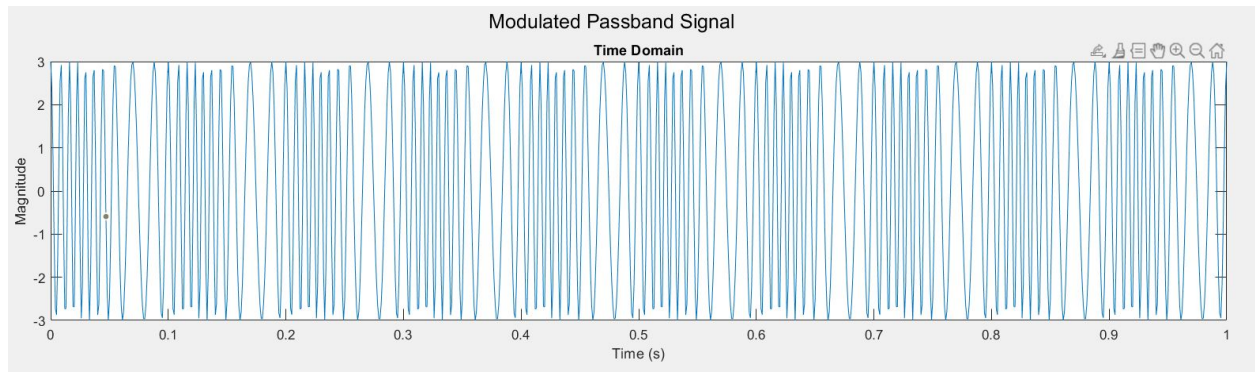
$F_s = 1000 \text{ Hz}$

Time-Domain Plots

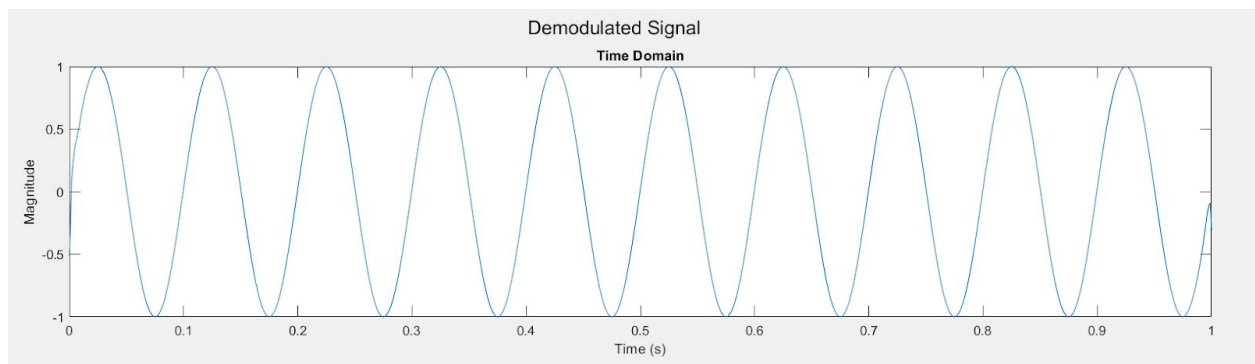
1. Message Signal



2. Modulated Signal

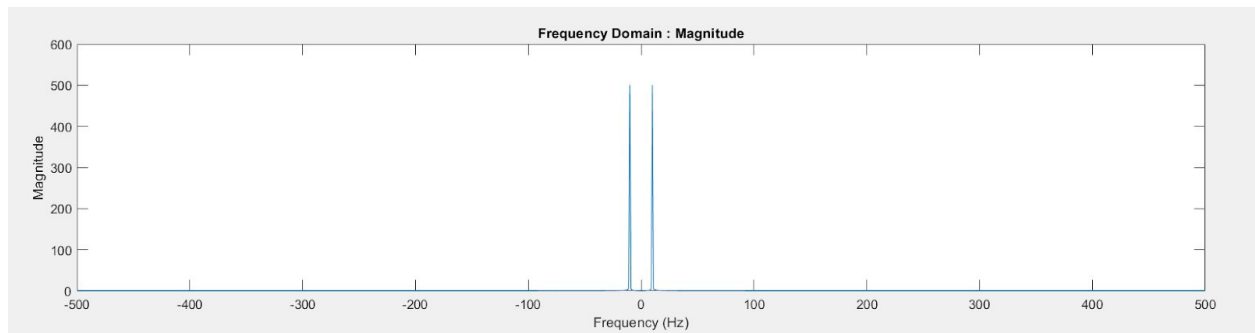


3. Demodulated Signal

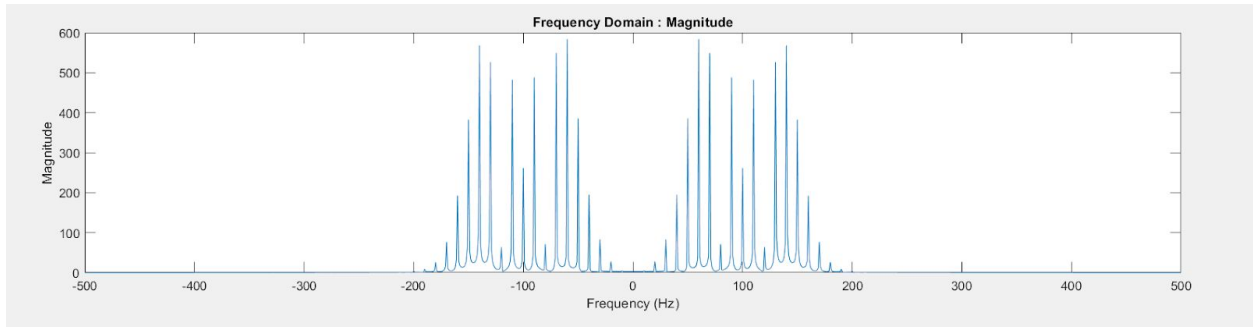


Frequency-Domain Plots

1. Message Signal



2. Modulated Signal



3. Demodulated Signal

