

Matlab Code of Pulse Amplitude Modulation

```
t=0:1/fs:0.1;
msg=0.5;
fm=25;
w=2*pi;
f=300;
overSampRate=650;
fs=overSampRate*f;
cycle=50;

%%Message Signal
xm= msg*cos(w*fm*t);
subplot(3,1,1);
plot(t,xm);
title('Message Signal');

%%Carrier Pulse Signal
xc=1+square(2*pi*f*t,cycle);
subplot(3,1,2);
plot(t,xc);
title('Carrier Pulse Signal');

%%Pulse Amplitude Modulation
p=xm.*xc;
subplot(3,1,3);
plot(t,p);
title('Pulse Amplitude Modulated wave');
```

