

1) GPRS - 900 MHz  $V = 320 \text{ km/h} \approx \frac{320000}{3600} = \frac{320}{3,6}$

$V = 88,88 \text{ ms}$   $\lambda = \frac{c}{f} = \frac{3 \cdot 10^8}{900 \cdot 10^6}$

$f_0 = \frac{v}{\lambda} = \frac{3 \cdot 10^2}{9} = \frac{3}{9} = \frac{1}{3} = 0,33 \text{ m}$

$f_0 = \frac{88,88}{0,33} = 269,33 \text{ Hz}$

$T_e = \frac{1}{2f_p} = \frac{1}{2 \cdot 269,33} = \frac{1}{538,66} = 0,00185 \text{ s}$

$T_s = 185 \text{ ms}$

$T_s = \frac{1}{R_s}$

$R_s \text{ para GPRS} = 200 \text{ K}$

$T_s = \frac{1}{200 \text{ K}} = 5 \mu\text{s}$

$T_s < T_e = \text{Desvanecimento}$   
lento