LTspice simulation

VDD	5 V		VDD	3.3 V
R (Ohm)	**freq (Hz)**		**R (Ohm)**	**freq (Hz)**
1.E-01	18,032		1.E-01	18,022
3.E-01	18,029			
1.E+00	17,993			
3.E+00	17,904			
1.E+01	17,596			
3.E+01	16,777			
1.E+02	14,427			
3.E+02	10,308			
1.E+03	5,172		1.E+03	5,168
3.E+03	2,156			
1.E+04	737			
3.E+04	284			
1.E+05	120		1.E+05	120
3.E+05	72			
1.E+06	55			
3.E+06	50			
1.E+07	49		1.E+07	49

Frequency response

$y = 1.5876\mathrm{E}{+}06 x^{-8.2972\mathrm{E}{-}01}$

Frequency response

$y = 2.9415\mathrm{E}{+}07 x^{-1.2036\mathrm{E}{+}00}$