

Fig. 1. LO, +17dBm 600MHz. The input is green, rms=203mV. The output is black, mean=95mV. Gain=(-6.6)dB.

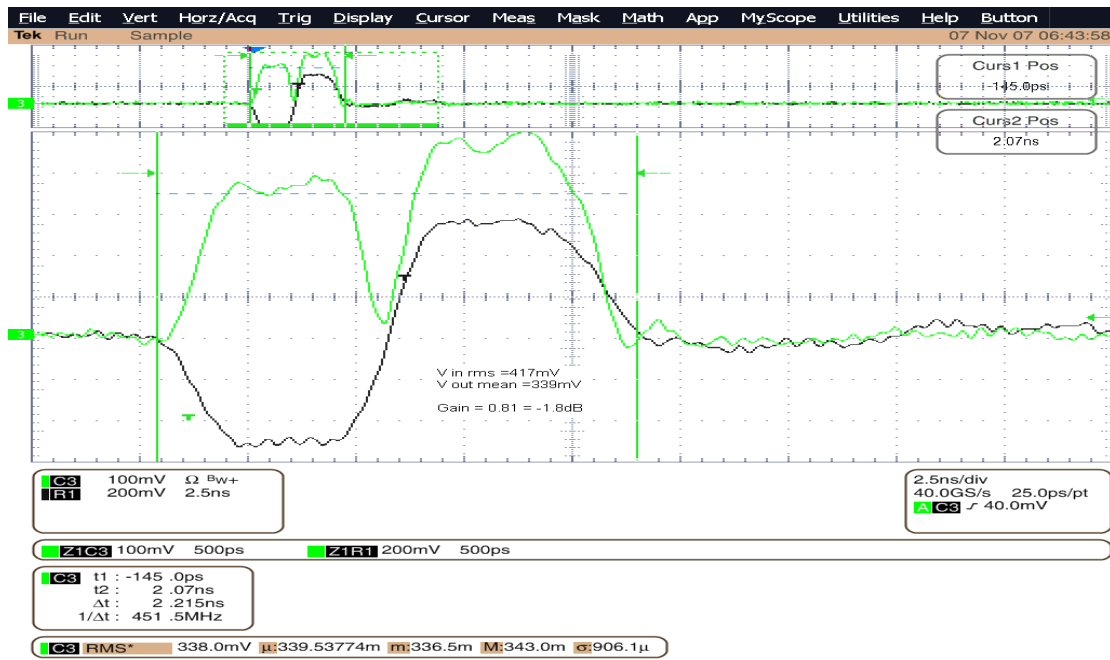


Fig. 2. LO (similar to the black) p-t-p=±1.6V. The input is black, rms=417mV. The output is green, mean=339mV. Gain=0.81=(-1.8)dB.

Note 1. **NF=1.8dB.**

Note 2. Asymmetry of output pulses. The first harmonic, p-t-p~(-12)dB. At the LPF output (-36dB or -32dB at 600MHz), the 600MHz p-t-p residue is expected to be lower than (-48 or -44)dB. **1/300 or 1/160!**

Note 3. The gaps between output pulses. The second harmonic, ampl~2x(Tgap/Tpulse)~(-6)dB. At the LPF output (-80dB or -70dB at 1200MHz), the 1200MHz p-t-p residue is expected to be lower than (-80 or -70)dB. **OK.**



Fig. 3. LO p-t-p= ± 1.6 V as in Fig. 2. The input=0. The LO p-t-p isolation is better than 32dB.

At the LPF output (-36 dB or -32 dB at 600MHz), the 600MHz p-t-p residue is expected to be lower than (-68 or -64)dB. **OK.**