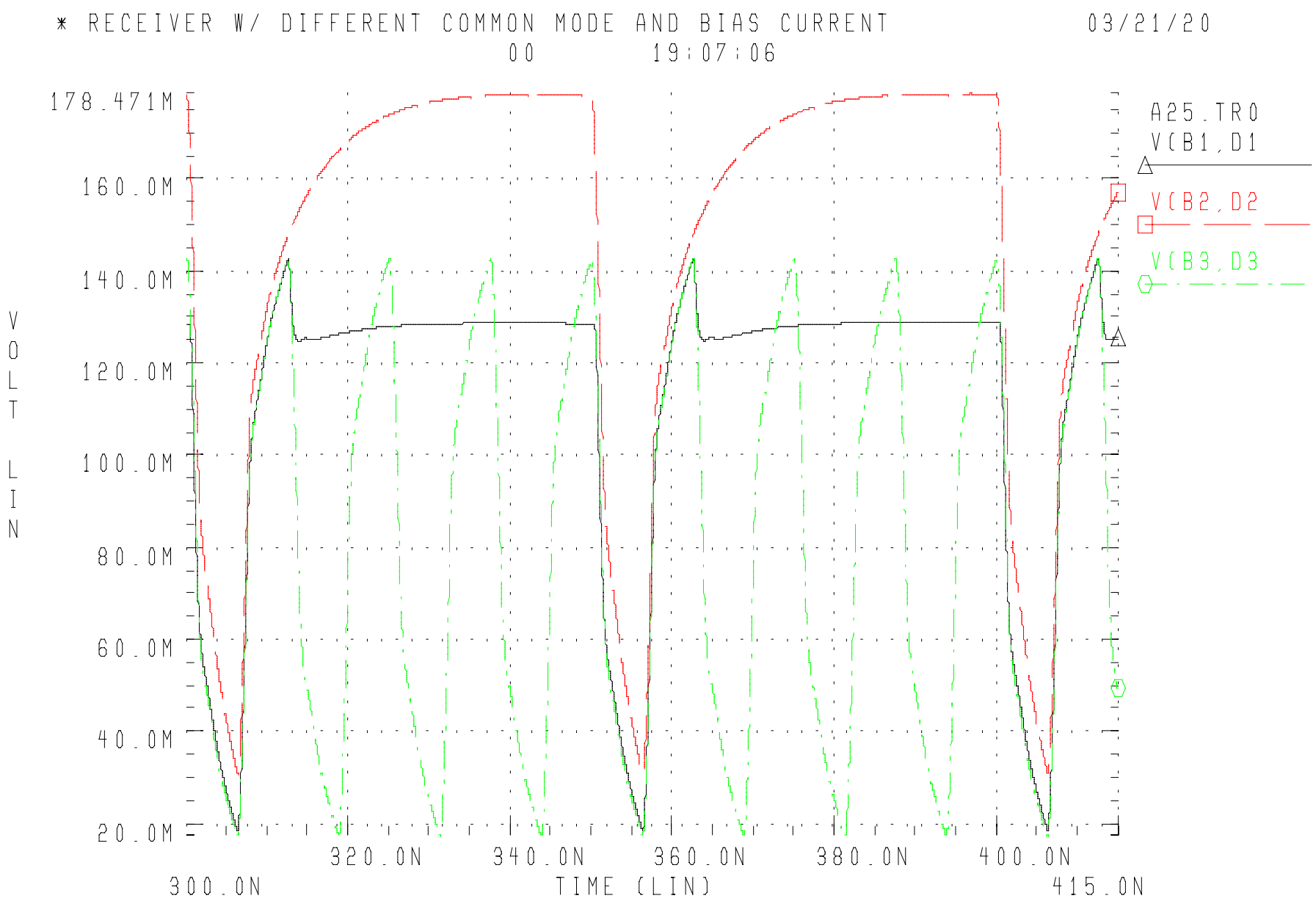
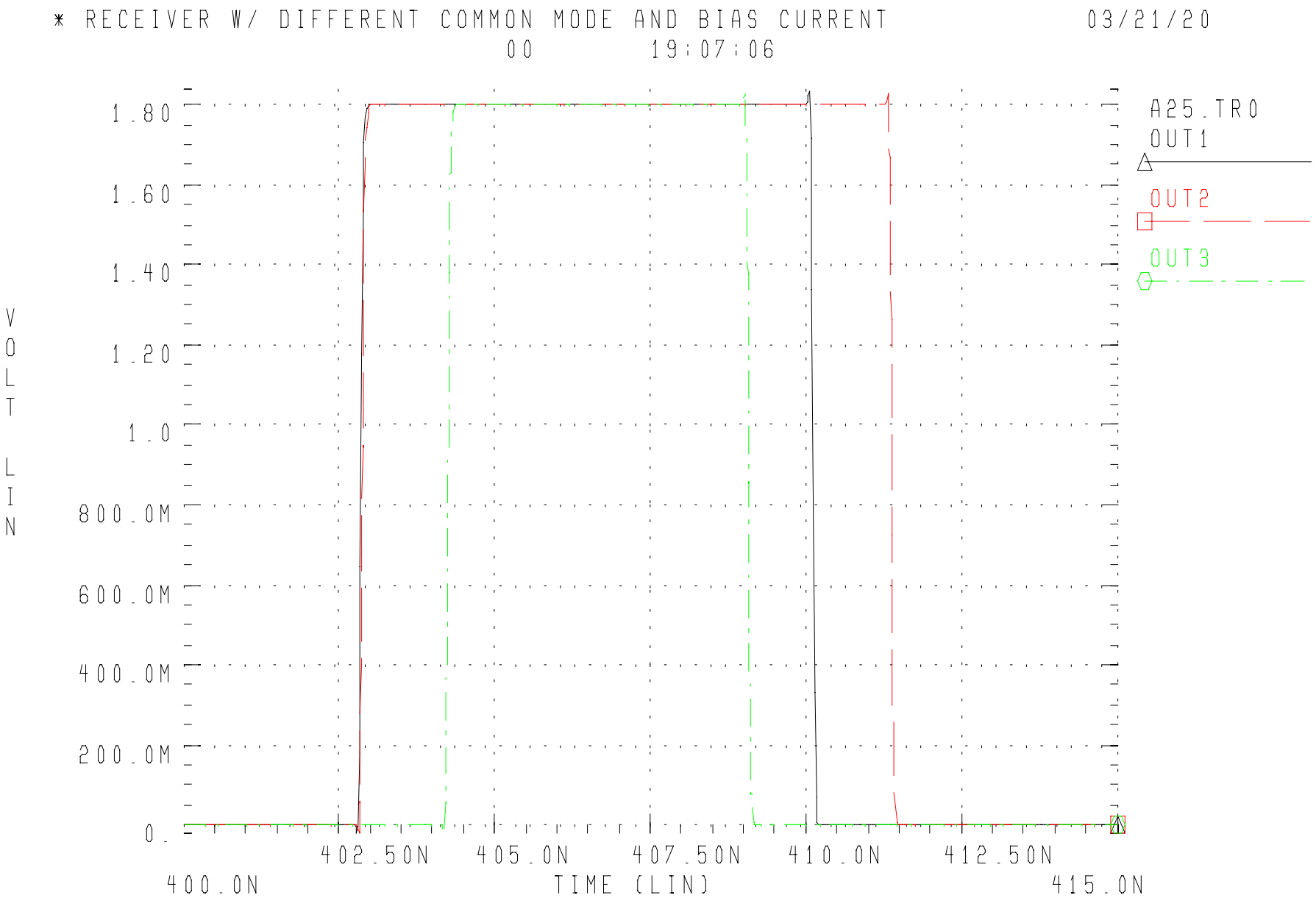
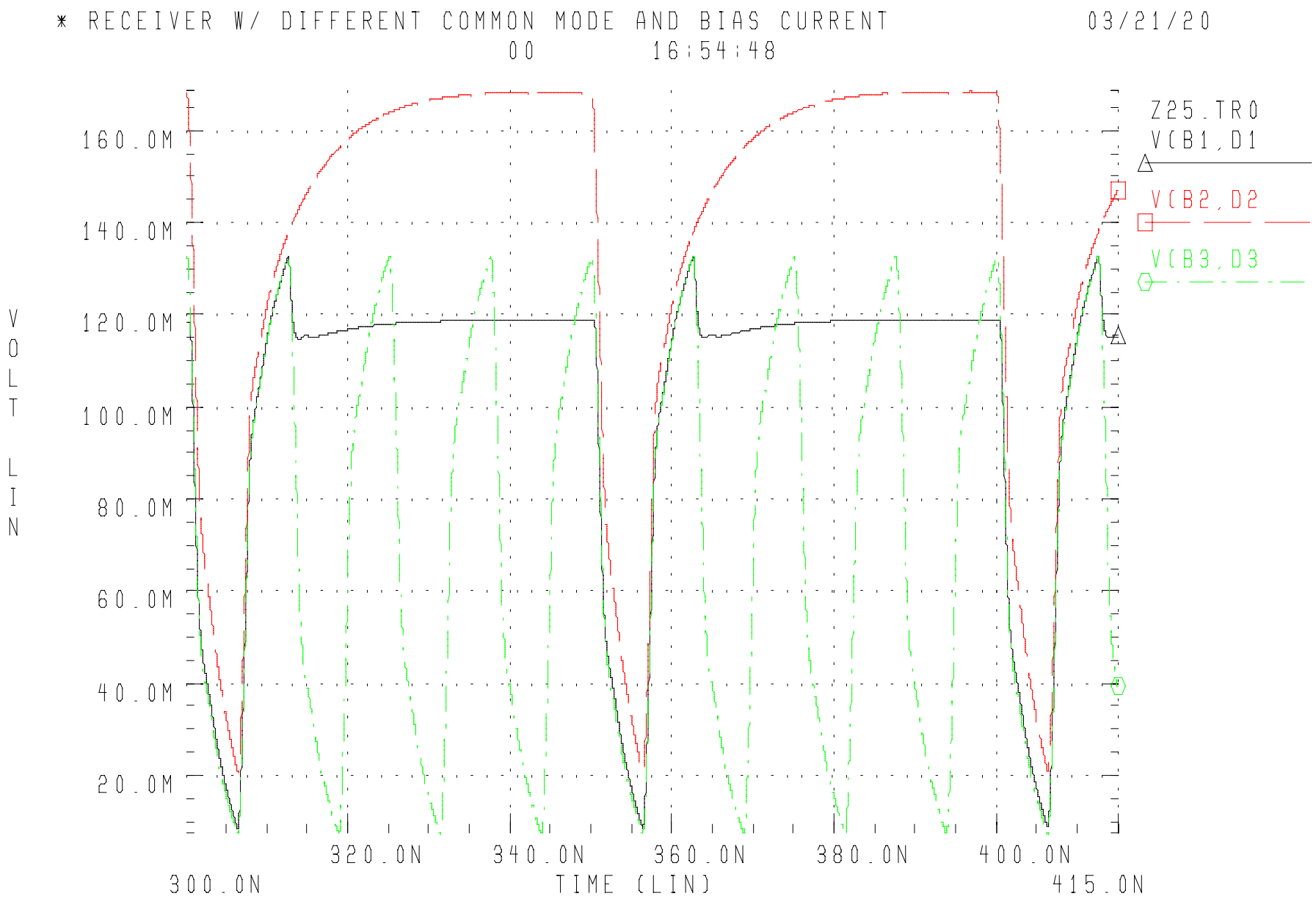
Plot A25.1


* RECEIVER W/ DIFFERENT COMMON MODE AND BIAS CURRENT
03/21/20
00
19:07:06
178.471M
160.0M
140.0M
120.0M
100.0M
80.0M
60.0M
40.0M
20.0M
VOLT LIN
300.0N
320.0N
340.0N
360.0N
380.0N
400.0N
415.0N
TIME (LIN)
A25.TR0
V(B1,D1
V(B2,D2
V(B3,D3

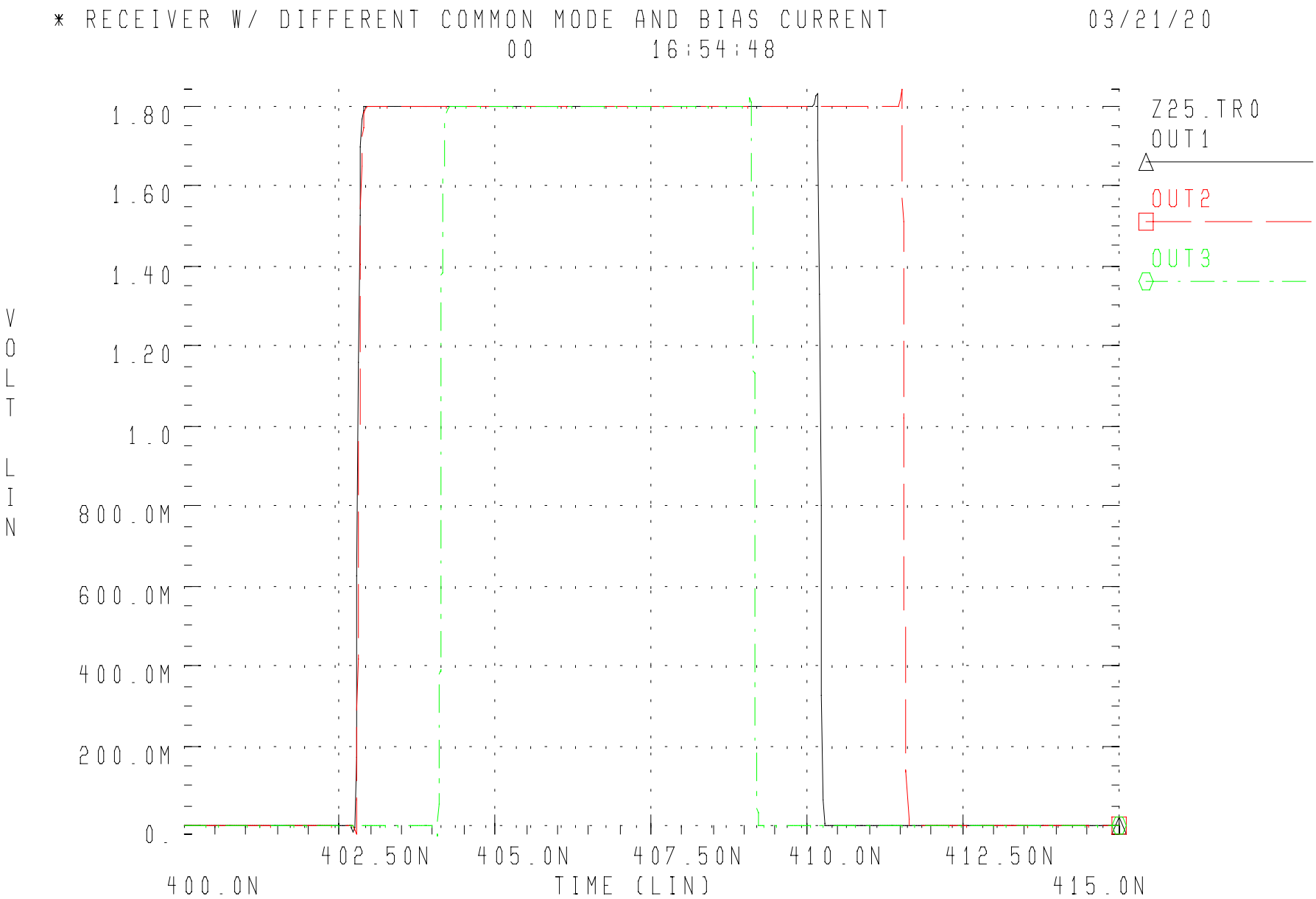
Plot A25.2


* RECEIVER W/ DIFFERENT COMMON MODE AND BIAS CURRENT
03/21/20
00
19:07:06
A25.TR0
OUT1
OUT2
OUT3
1.80
1.60
1.40
1.20
1.0
800.0M
600.0M
400.0M
200.0M
0.
VOLT LIN
400.0N
402.50N
405.0N
407.50N
410.0N
412.50N
415.0N
TIME (LIN)

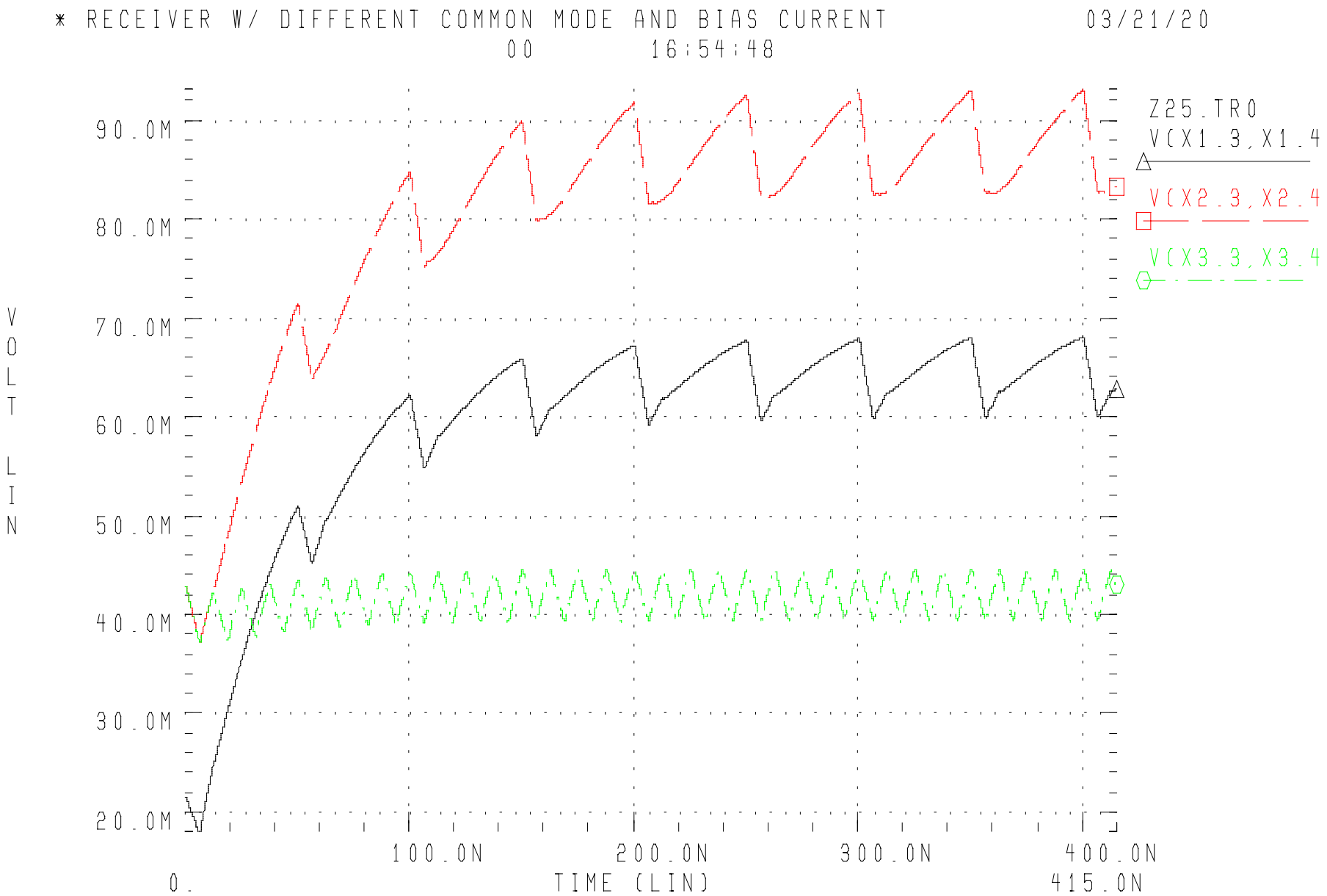
Plot Z25.1


* RECEIVER W/ DIFFERENT COMMON MODE AND BIAS CURRENT
03/21/20
00
16:54:48
Z25.TR0
V(B1,D1
V(B2,D2
V(B3,D3
160.0M
140.0M
120.0M
100.0M
80.0M
60.0M
40.0M
20.0M
VOLT LIN
300.0N
320.0N
340.0N
360.0N
380.0N
400.0N
415.0N
TIME (LIN)

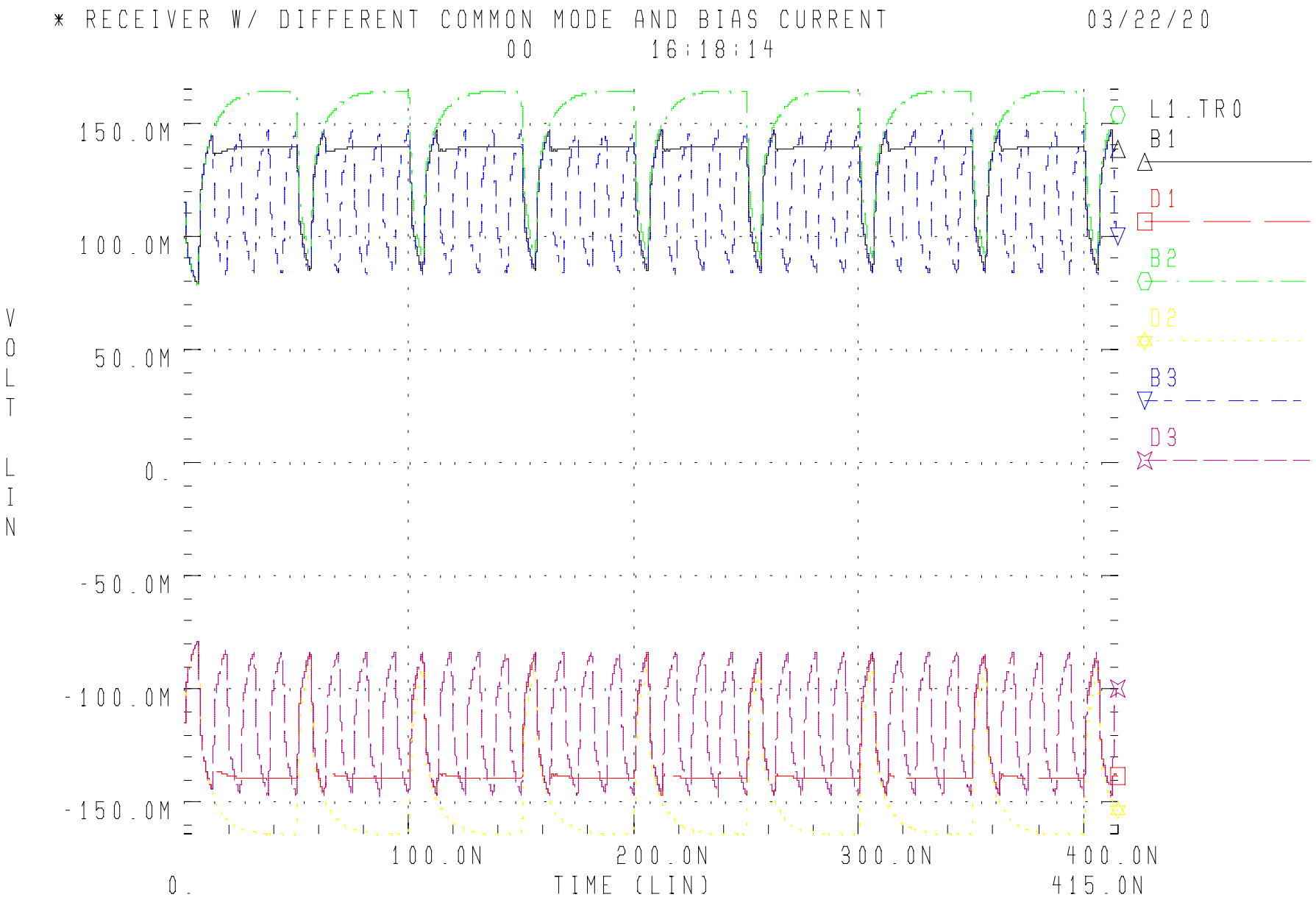
Plot Z25.2


* RECEIVER W/ DIFFERENT COMMON MODE AND BIAS CURRENT
03/21/20
00
16:54:48
Z25.TR0
OUT1
OUT2
OUT3
1.80
1.60
1.40
1.20
1.0
800.0M
600.0M
400.0M
200.0M
0.
VOLT
LIN
400.0N
402.50N
405.0N
407.50N
410.0N
412.50N
415.0N
TIME (LIN)

Plot Z25.3


* RECEIVER W/ DIFFERENT COMMON MODE AND BIAS CURRENT
03/21/20
00
16:54:48
Z25.TR0
V(X1.3,X1.4
V(X2.3,X2.4
V(X3.3,X3.4
VOLT
LIN
90.0M
80.0M
70.0M
60.0M
50.0M
40.0M
30.0M
20.0M
0.
100.0N
200.0N
300.0N
400.0N
TIME (LIN)
415.0N

Plot L1.1


* RECEIVER W/ DIFFERENT COMMON MODE AND BIAS CURRENT
03/22/20
00
16:18:14
150.0M
100.0M
50.0M
0.
-50.0M
-100.0M
-150.0M
VOLT
LIN
100.0N
200.0N
300.0N
400.0N
0.
TIME (LIN)
415.0N
L1.TR0
B1
D1
B2
D2
B3
D3

Plot L1.2


* RECEIVER W/ DIFFERENT COMMON MODE AND BIAS CURRENT
03/22/20
00
16:18:14
L1.TR0
OUT1
OUT2
OUT3
VOLT LIN
1.80
1.60
1.40
1.20
1.0
800.0M
600.0M
400.0M
200.0M
0.
400.0N
402.50N
405.0N
407.50N
410.0N
412.50N
415.0N
TIME (LIN)

Explanation of Plots

- A25.1 shows waveform into the equalizer at the IC, with 20mV of non-zero crossing
- A25.2 shows the output of the comparator, notice that the 101010 signal is almost broken at this amount of non-zero crossing
- Z25.1 shows waveform into the equalizer at the IC, with 10mV of non-zero crossing
- Z25.2 shows the output of the comparator, notice that the 101010 signal is about 0.5ns more for this amount of non-zero crossing
- Z25.3 shows the output of the equalizer, notice that the 10101010 has a much lower amplitude than the other 2 signals. This is a effect of going to an edge based detection, as opposed to level based detection as we do now. **ARE WE READY FOR EDGE BASED DETECTION??**
- L1.1 shows the plus & the minus signals instead of v(plus,minus), this is to remind you that the signals do not cross zero, or get even close to it. L1.1 has about 167mV of non-zero crossing.
- In L1.2 you can see that the 10101010 signal is no longer detected by the comparator. It looks like the pre-comped signal will go away next. The problem with equalization that this slide shows, how much you could be affected by noise. An equalizer can make noise signals appear to be data signals.

Note: All Red colored signals have **NO** Pre-comp and a 1111111011111110 data pattern, All Black colored signals have the same data pattern, but, they **Have** Pre-comp. The Green colored signals are a 10101010101010 pattern. The amount of pre-comp is 50%, the way I talk about it, and a 1010101010 data pattern has the same amplitude of the other signals.