

## TEST REPORT

REPORT NO: SATEL-TR-0012-TaM  
TEST PERIOD: 29.-30. October 2001  
TEST SITE: Satel / R&D Dept., Salo  
  
DEVICE UNDER TEST: SATELLINE-3AS Epic

TESTS PERFORMED:

- Transient Frequency Behaviour of the transmitter
  - #1: at 12.5 kHz channel spacing  
(pages 2 to 10, figures 1-18) and
  - #2: at 25 kHz channel spacing  
(pages 11 to 19, figures 19-36)

on various temperatures  
(-30, -20, -10,  $\pm 0$ , +10, +20, +30, +40, +50 °C)

TEST STANDARD: TIA/EIA-603, clause 4.2.19.

TESTS PERFORMED BY:

Juha Heikkilä

## TEST RESULTS

### #1 Tests at 12.5 kHz channel spacing

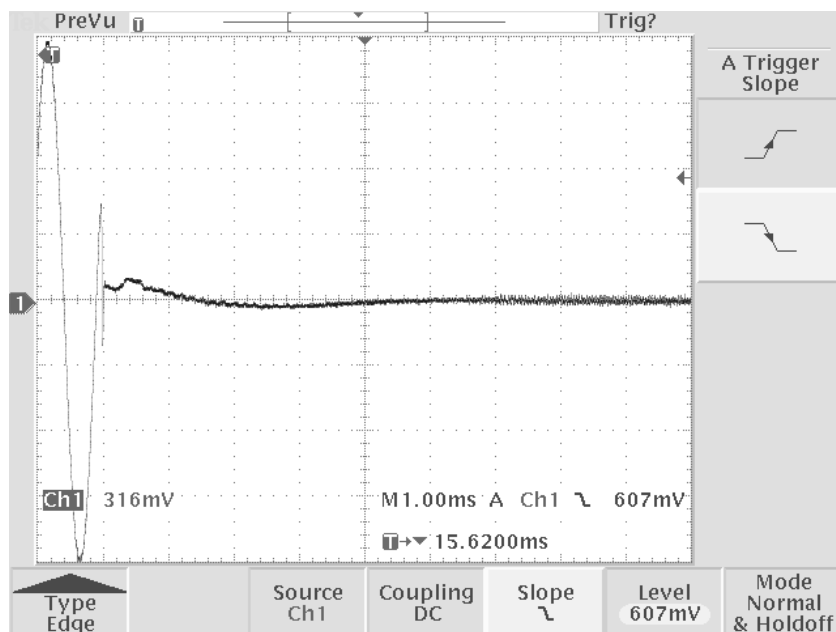


Fig. 1. Transmitter switched ON at  $-30^{\circ}\text{C}$ . (12.5 kHz ch. sp.)

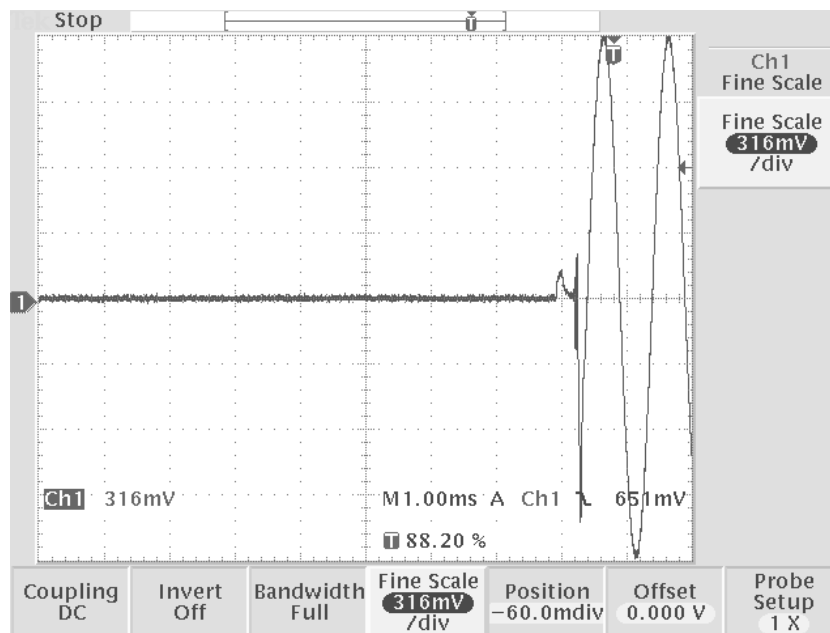


Fig. 2. Transmitter switched OFF at  $-30^{\circ}\text{C}$ . (12.5 kHz ch. sp.)

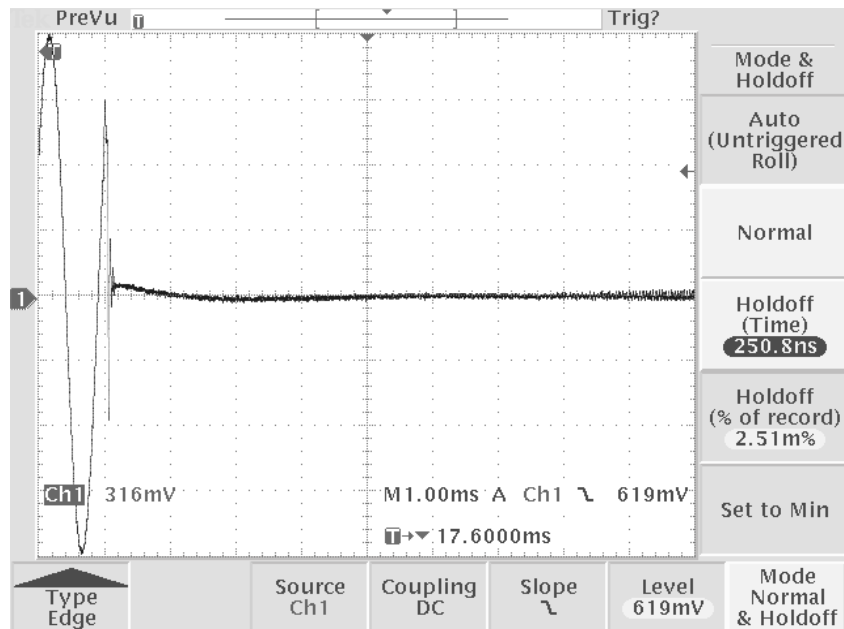


Fig. 3. Transmitter switched ON at -20 °C. (12.5 kHz ch. sp.)

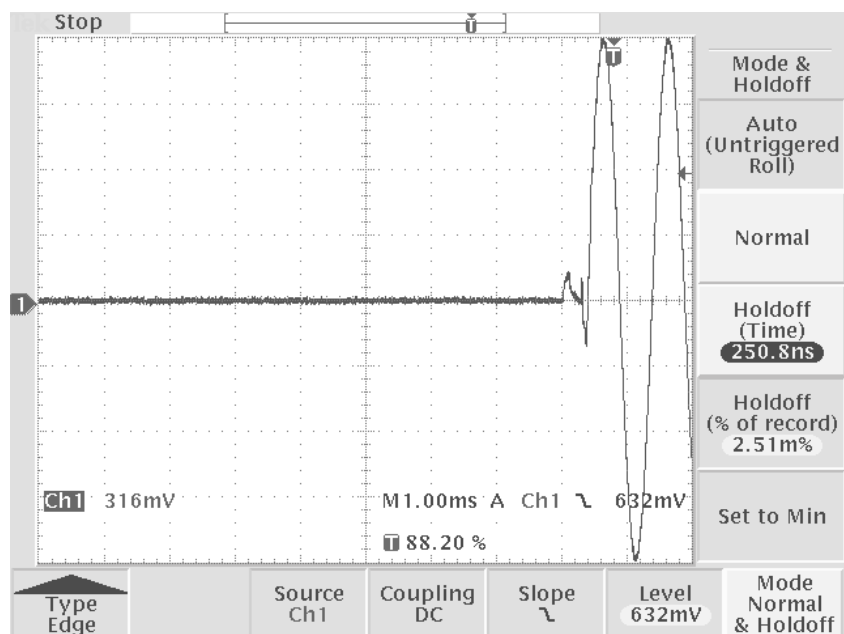


Fig. 4. Transmitter switched OFF at -20 °C. (12.5 kHz ch. sp.)

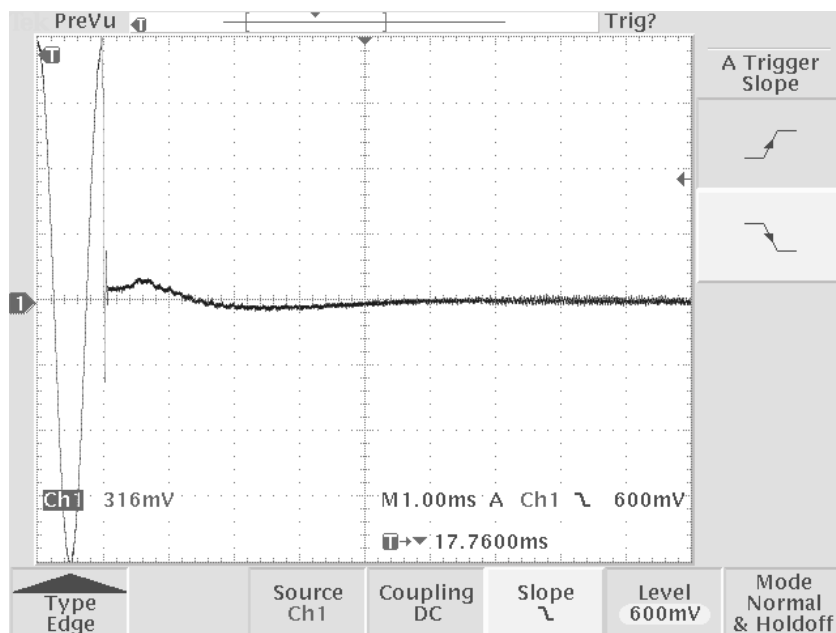


Fig. 5. Transmitter switched ON at  $-10^{\circ}\text{C}$ . (12.5 kHz ch. sp.)

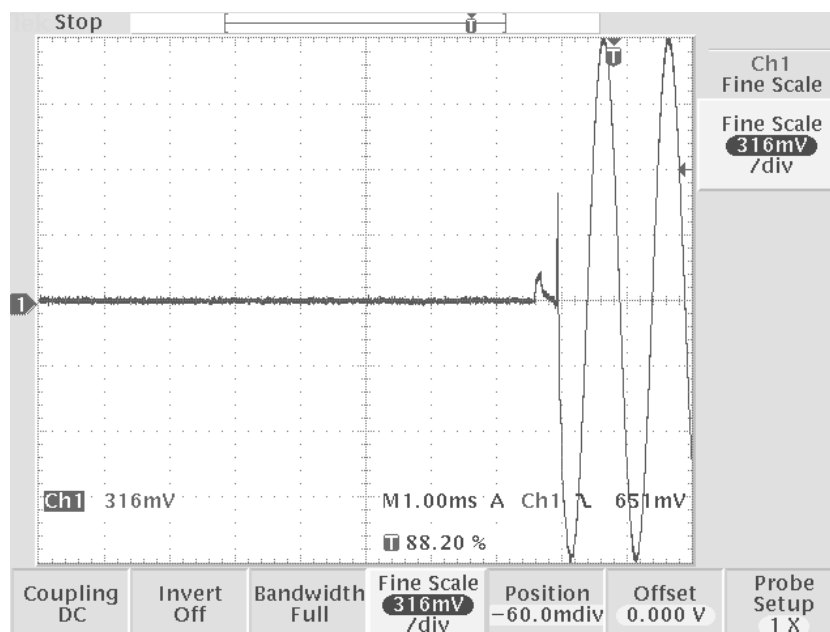


Fig. 6. Transmitter switched OFF at  $-10^{\circ}\text{C}$ . (12.5 kHz ch. sp.)

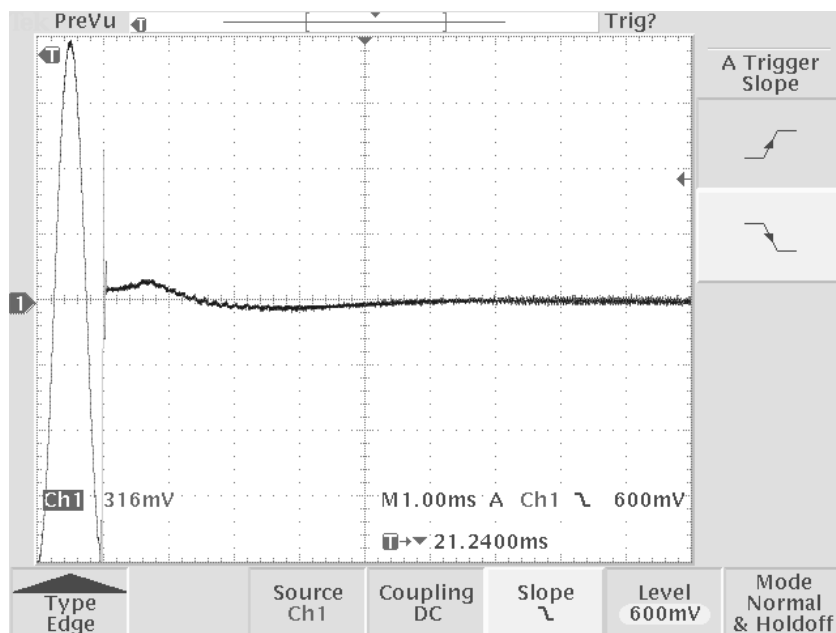


Fig. 7. Transmitter switched ON at 0 °C. (12.5 kHz ch. sp.)

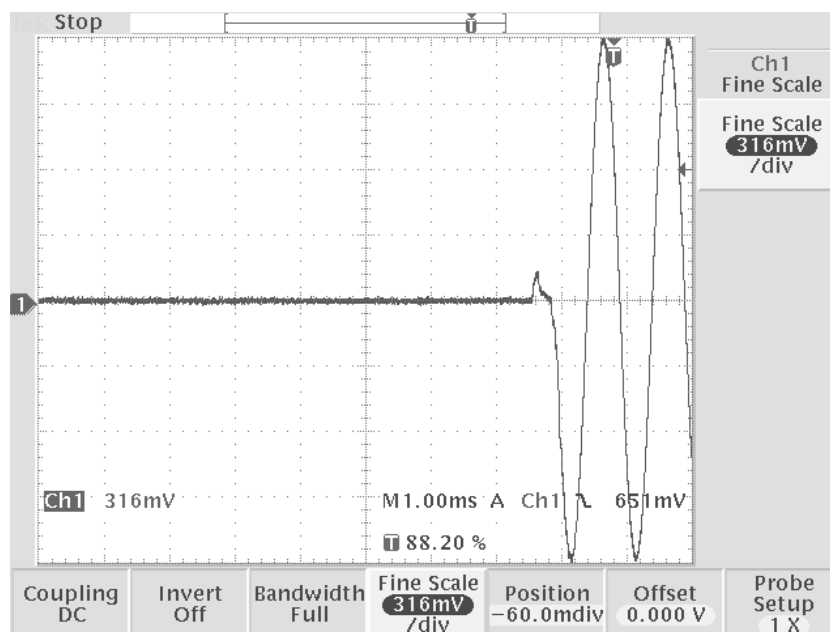


Fig. 8. Transmitter switched OFF at 0 °C. (12.5 kHz ch. sp.)

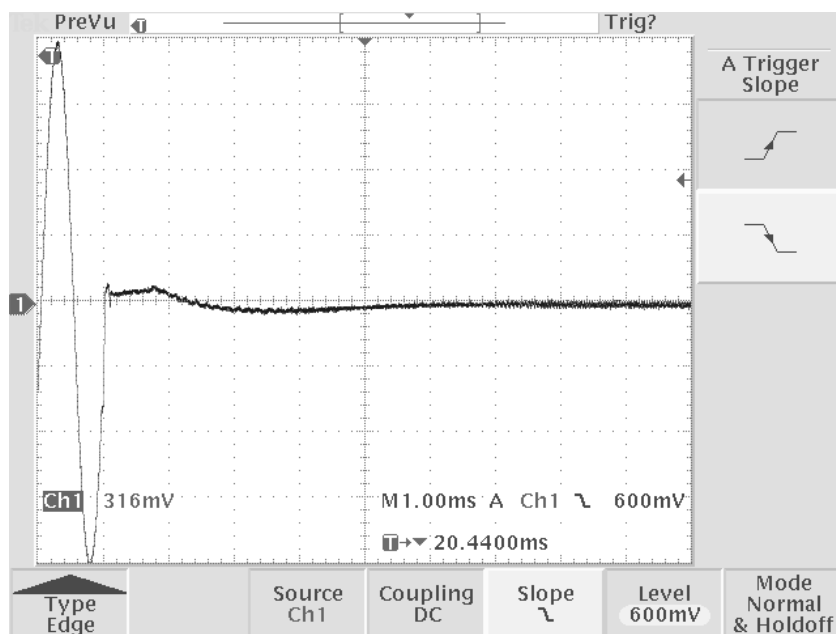


Fig. 9. Transmitter switched ON at +10 °C. (12.5 kHz ch. sp.)

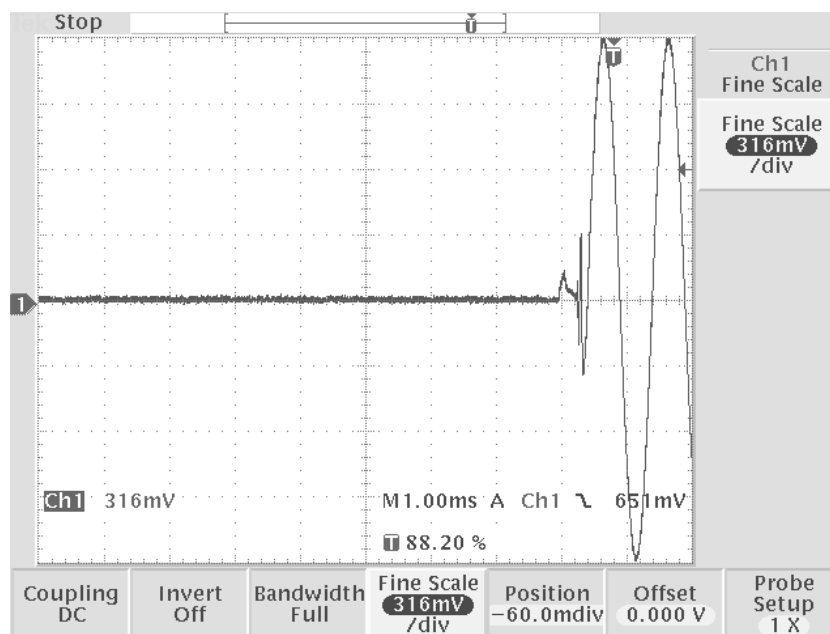


Fig. 10. Transmitter switched OFF at +10 °C. (12.5 kHz ch. sp.)

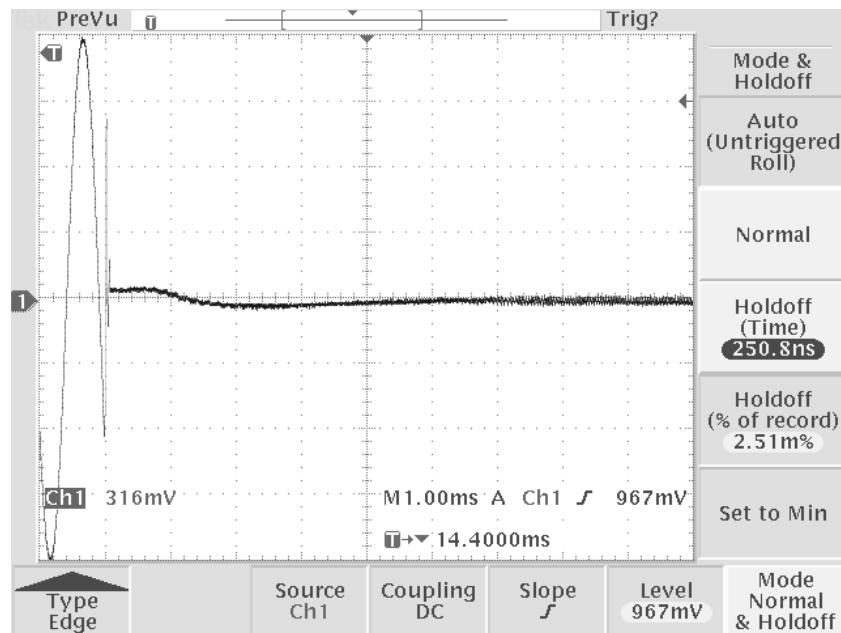


Fig. 11. Transmitter switched ON at +20 °C. (12.5 kHz ch. sp.)

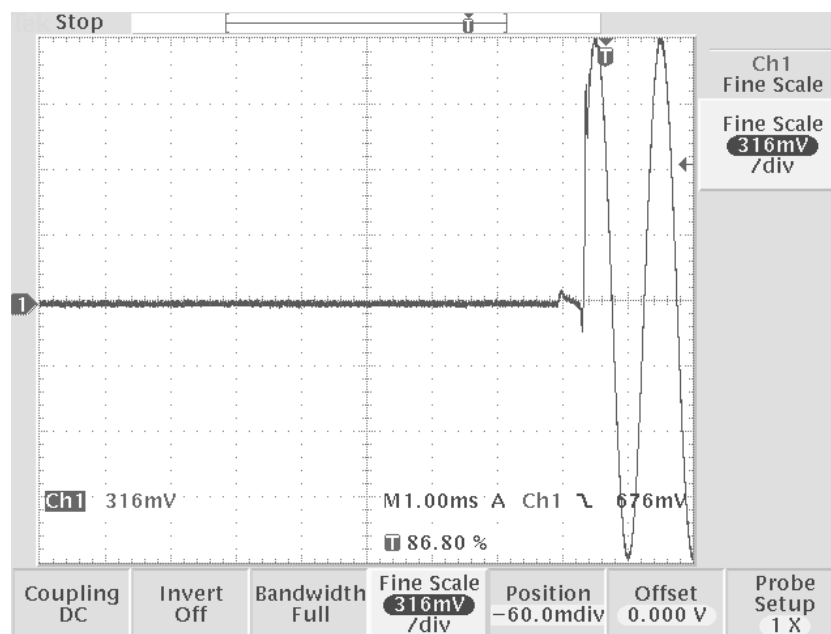


Fig. 12. Transmitter switched OFF at +20 °C. (12.5 kHz ch. sp.)

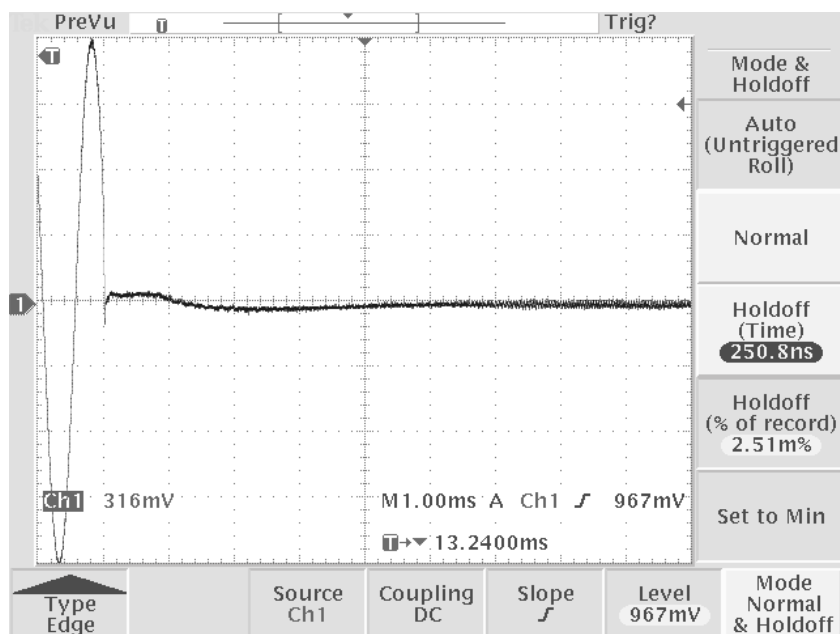


Fig. 13. Transmitter switched ON at +30 °C. (12.5 kHz ch. sp.)

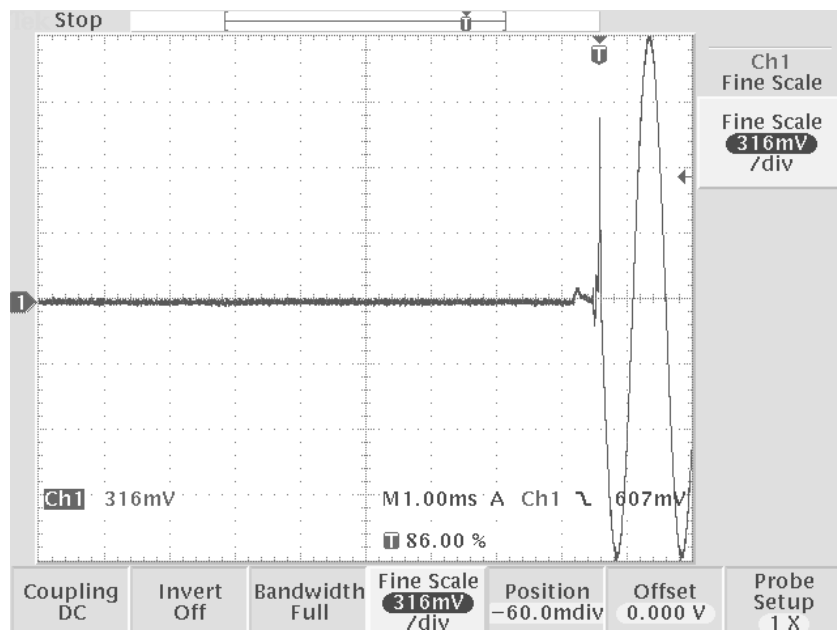


Fig. 14. Transmitter switched OFF at +30 °C. (12.5 kHz ch. sp.)

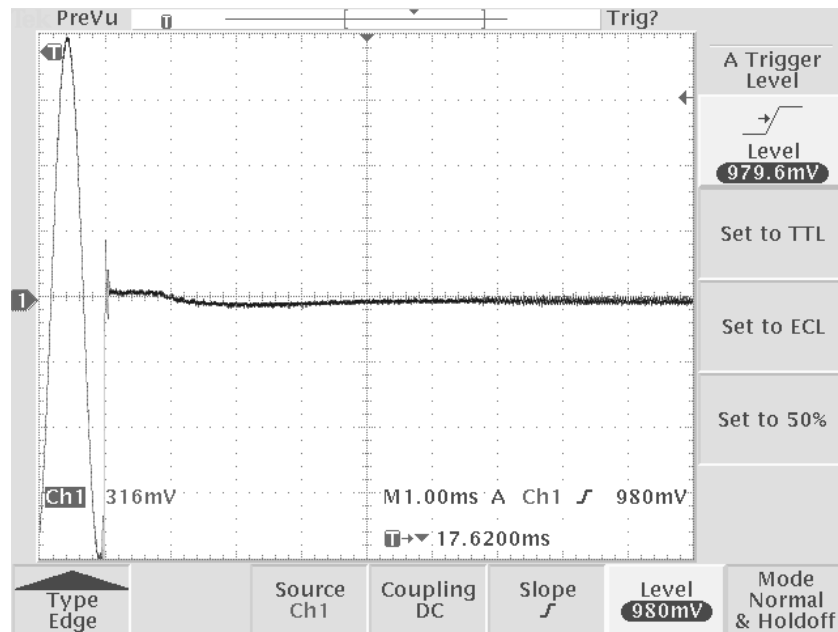


Fig. 15. Transmitter switched ON at +40 °C. (12.5 kHz ch. sp.)

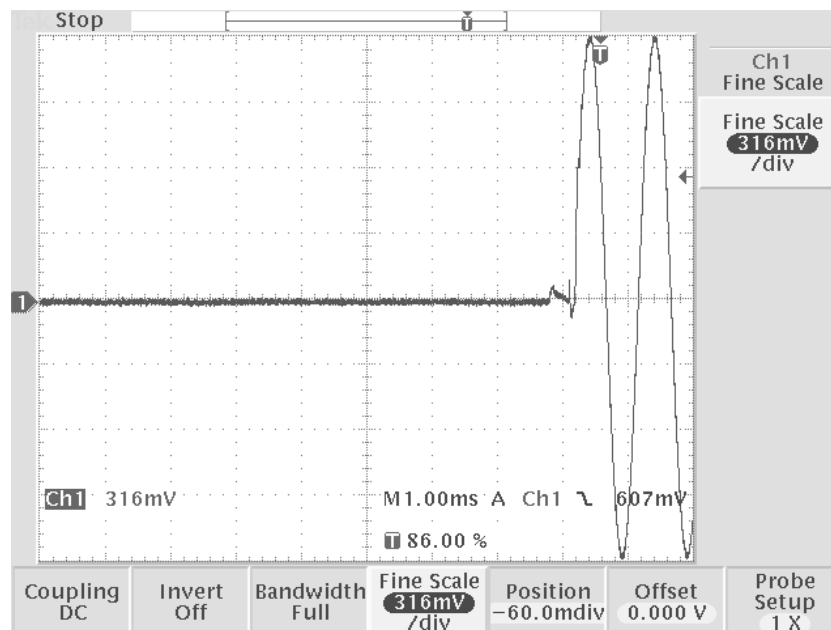


Fig. 16. Transmitter switched OFF at +40 °C. (12.5 kHz ch. sp.)

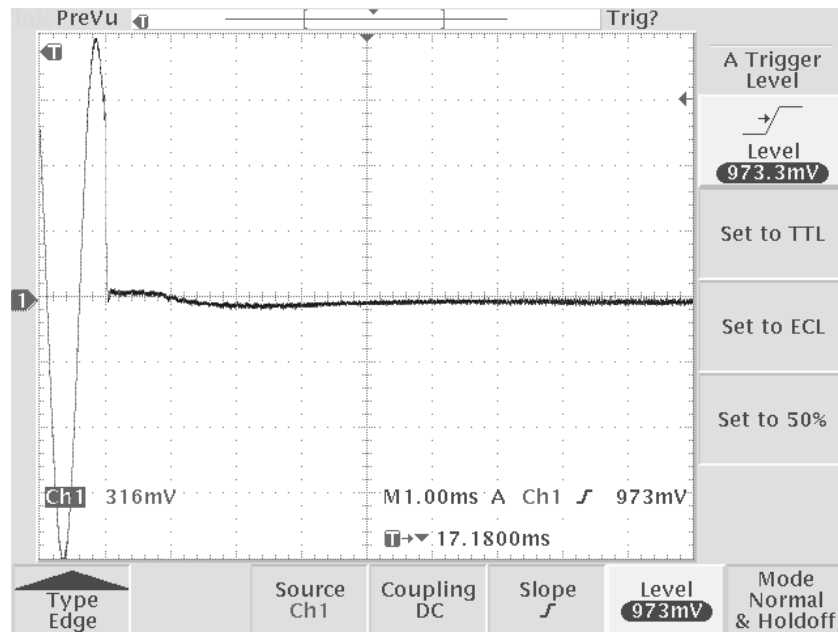


Fig. 17. Transmitter switched ON at +50 °C. (12.5 kHz ch. sp.)

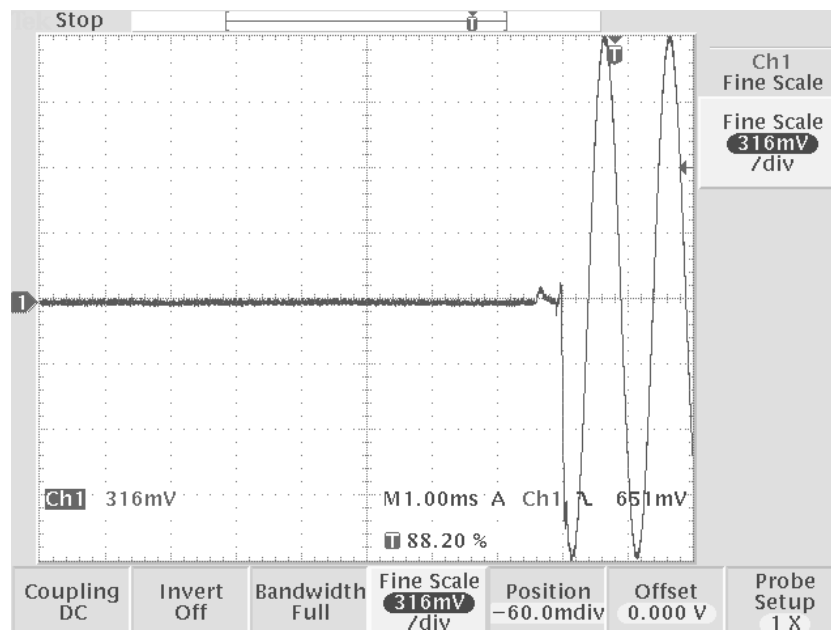


Fig. 18. Transmitter switched OFF at +50 °C. (12.5 kHz ch. sp.)

## #2 Tests at 25 kHz channel spacing

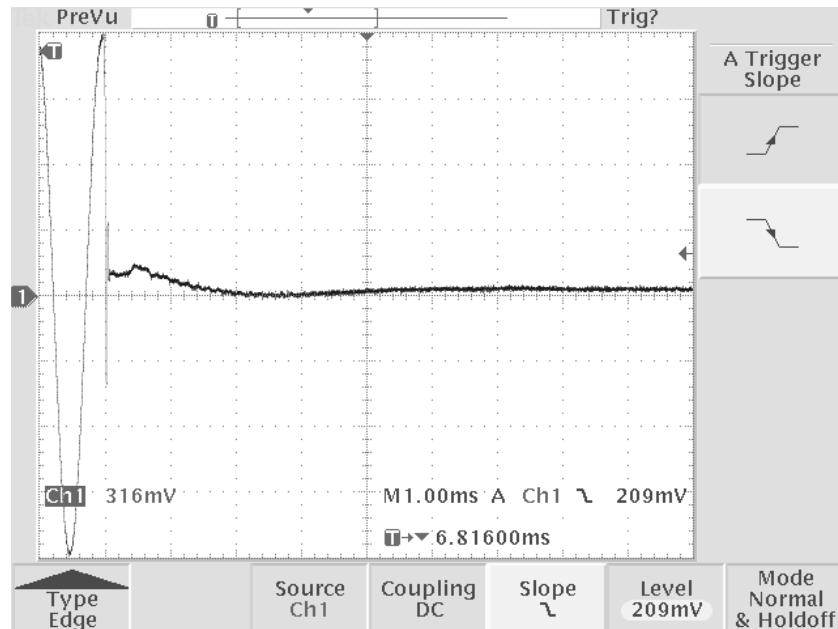


Fig. 19. Transmitter switched ON at  $-30^{\circ}\text{C}$ . (25 kHz ch. sp.)

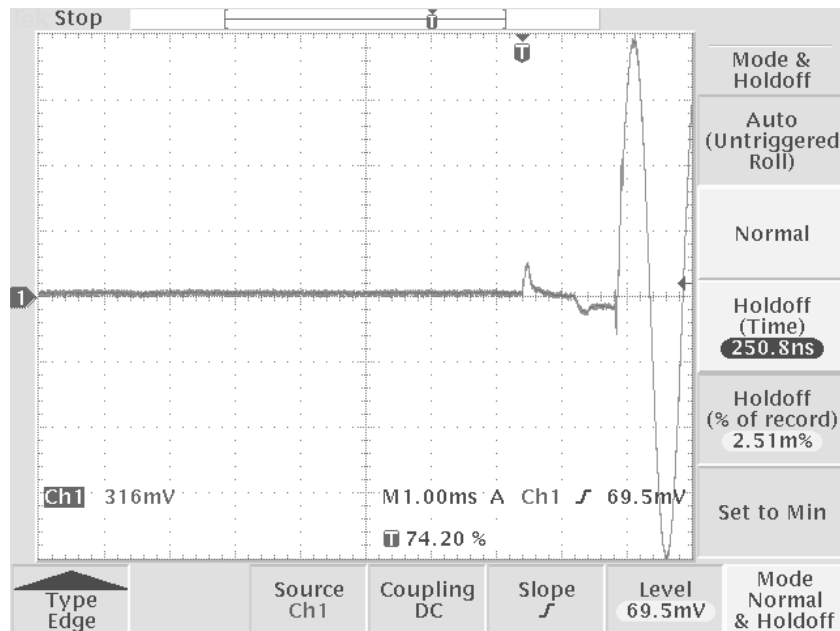


Fig. 20. Transmitter switched OFF at  $-30^{\circ}\text{C}$ . (25 kHz ch. sp.)

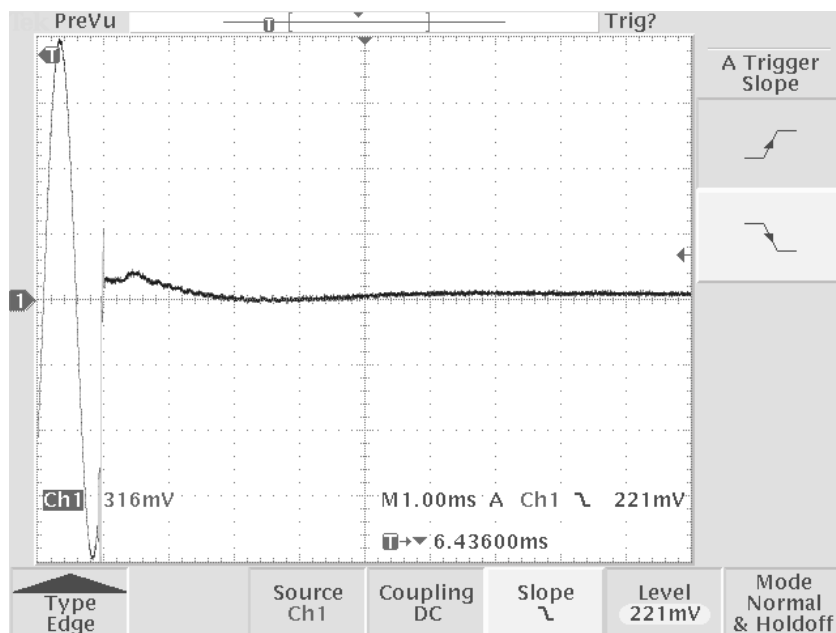


Fig. 21. Transmitter switched ON at  $-20^{\circ}\text{C}$ . (25 kHz ch. sp.)

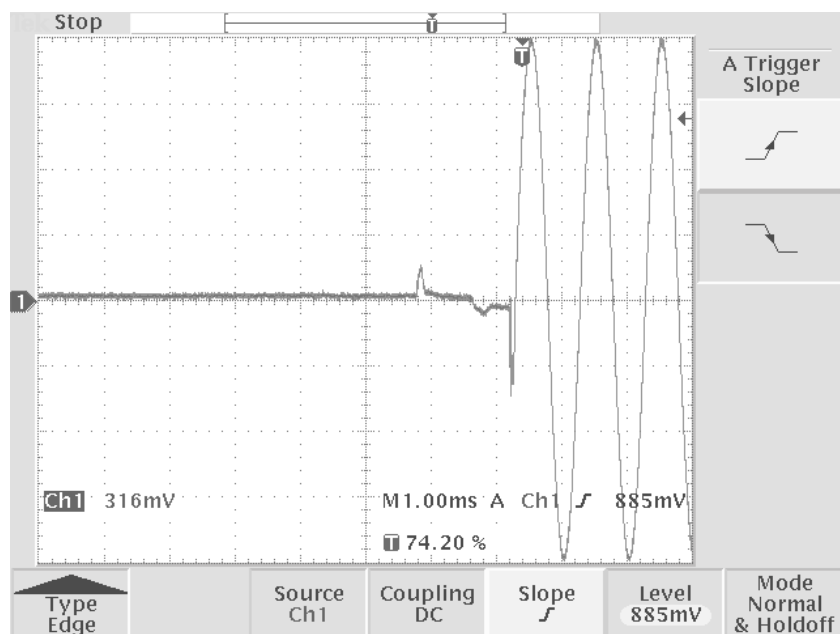


Fig. 22. Transmitter switched OFF at  $-20^{\circ}\text{C}$ . (25 kHz ch. sp.)

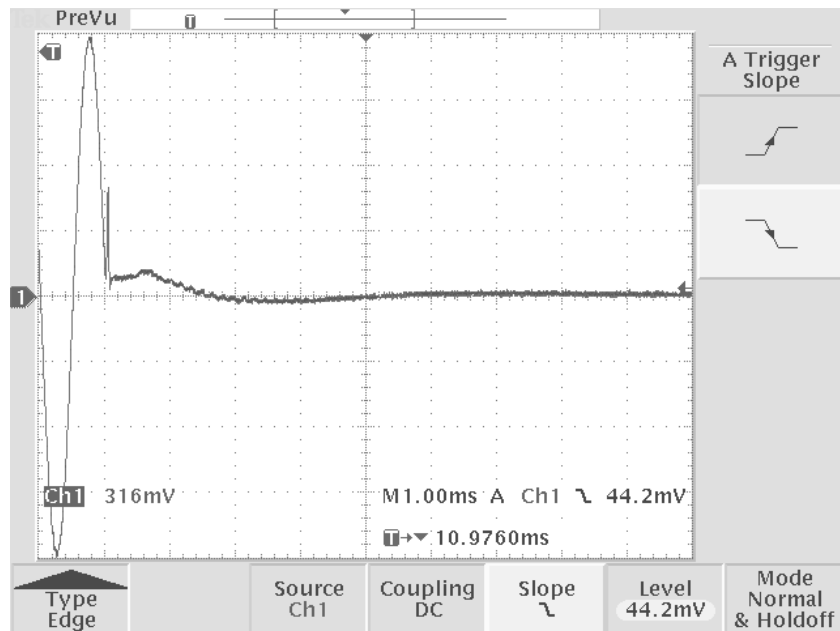


Fig. 23. Transmitter switched ON at  $-10^{\circ}\text{C}$ . (25 kHz ch. sp.)

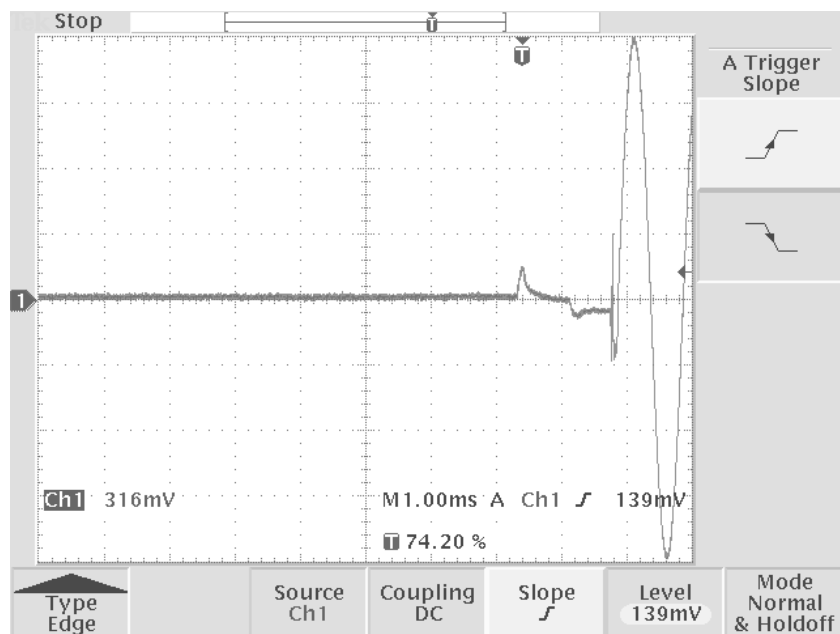


Fig. 24. Transmitter switched OFF at  $-10^{\circ}\text{C}$ . (25 kHz ch. sp.)

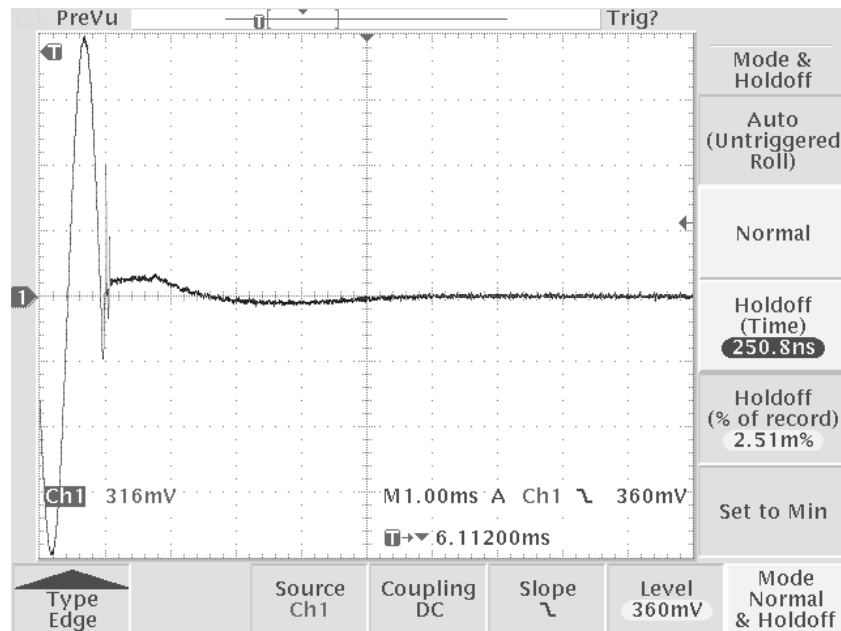


Fig. 25. Transmitter switched ON at 0 °C. (25 kHz ch. sp.)

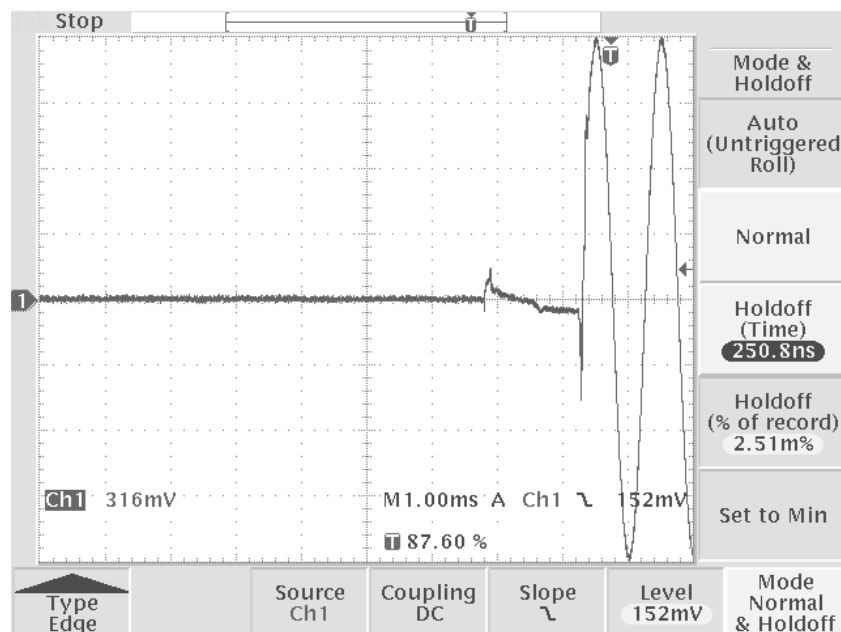


Fig. 26. Transmitter switched OFF at 0 °C. (25 kHz ch. sp.)

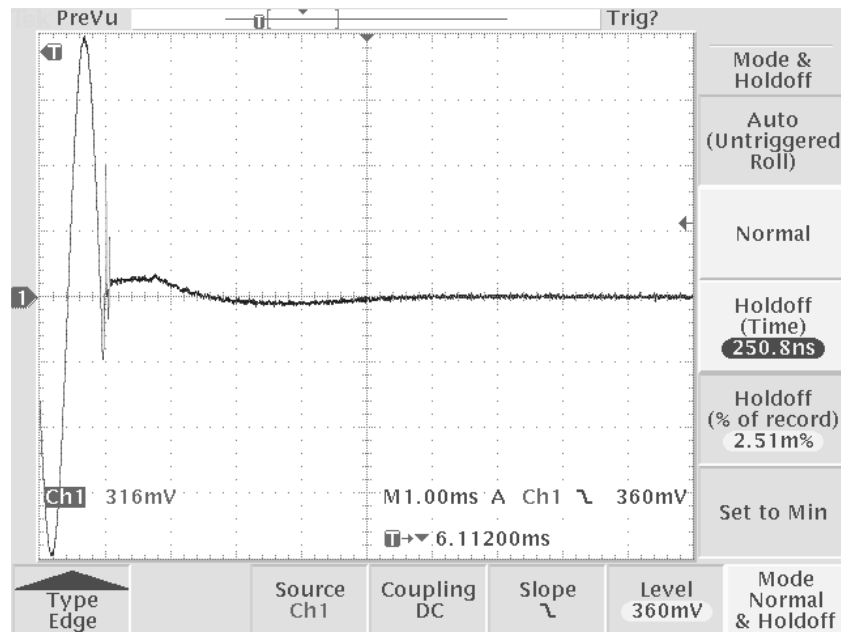


Fig. 27. Transmitter switched ON at +10 °C. (25 kHz ch. sp.)

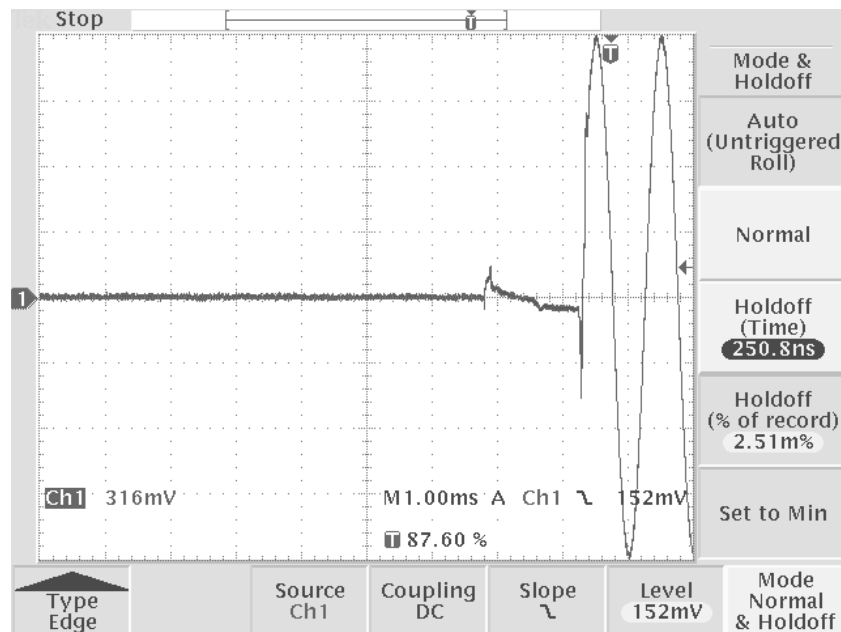


Fig. 28. Transmitter switched OFF at +10 °C. (25 kHz ch. sp.)

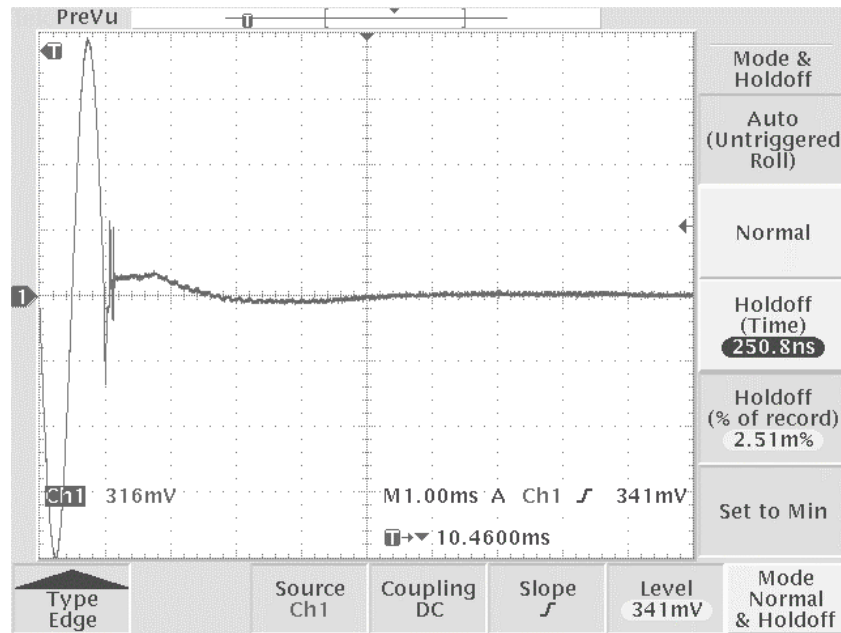


Fig. 29. Transmitter switched ON at +20 °C. (25 kHz ch. sp.)

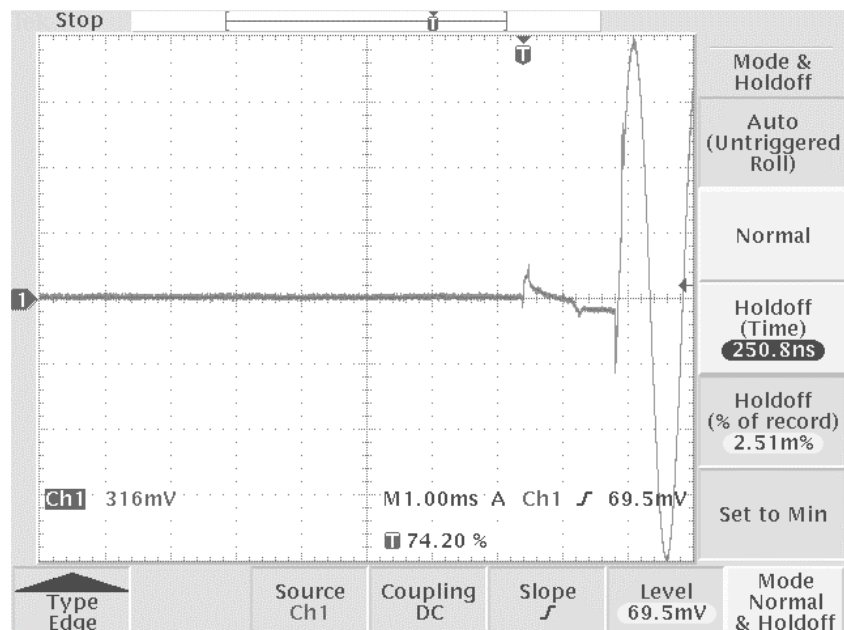


Fig. 30. Transmitter switched OFF at +20 °C. (25 kHz ch. sp.)

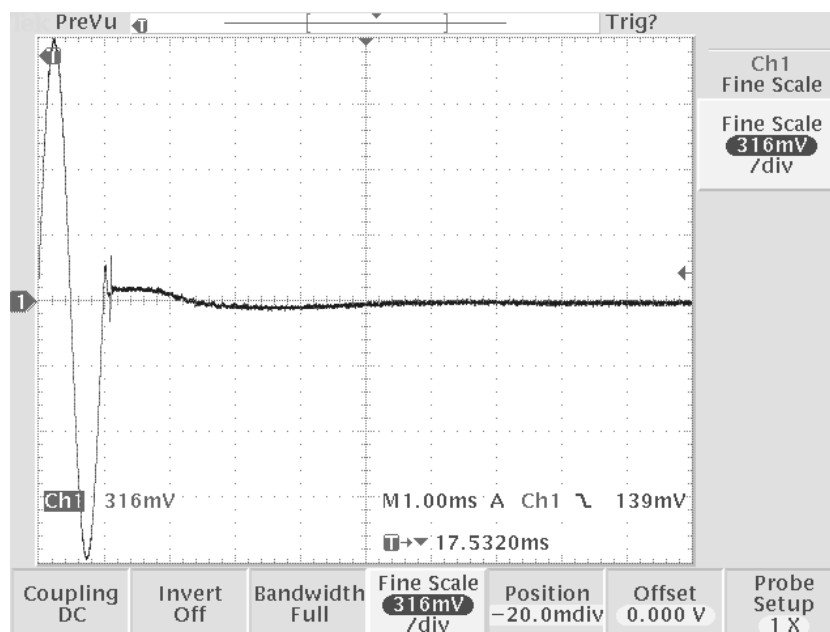


Fig. 31. Transmitter switched ON at +30 °C. (25 kHz ch. sp.)

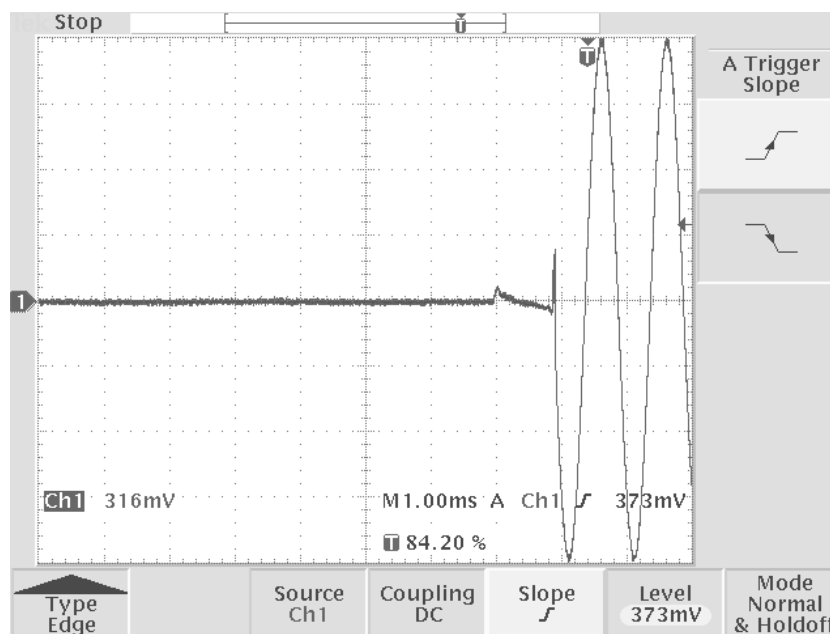


Fig. 32. Transmitter switched OFF at +30 °C. (25 kHz ch. sp.)

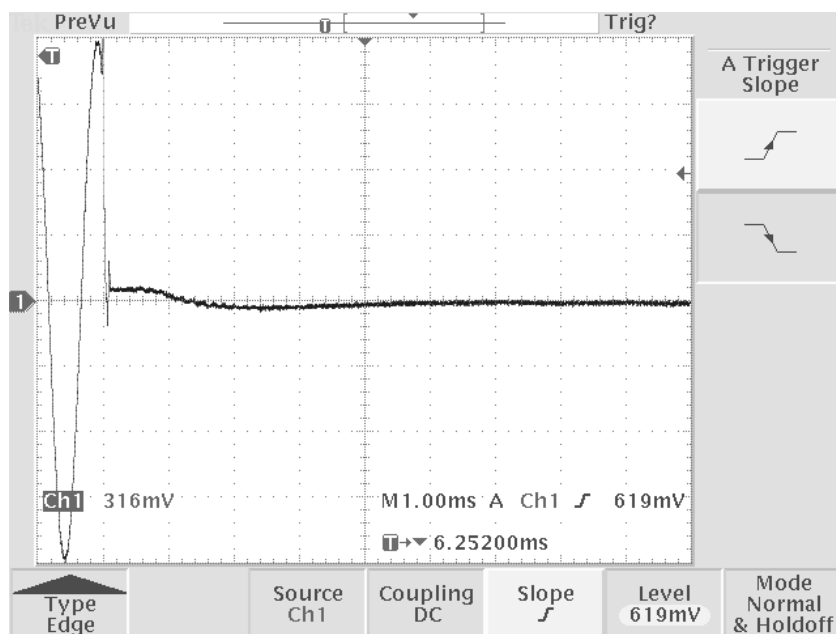


Fig. 33. Transmitter switched ON at +40 °C. (25 kHz ch. sp.)

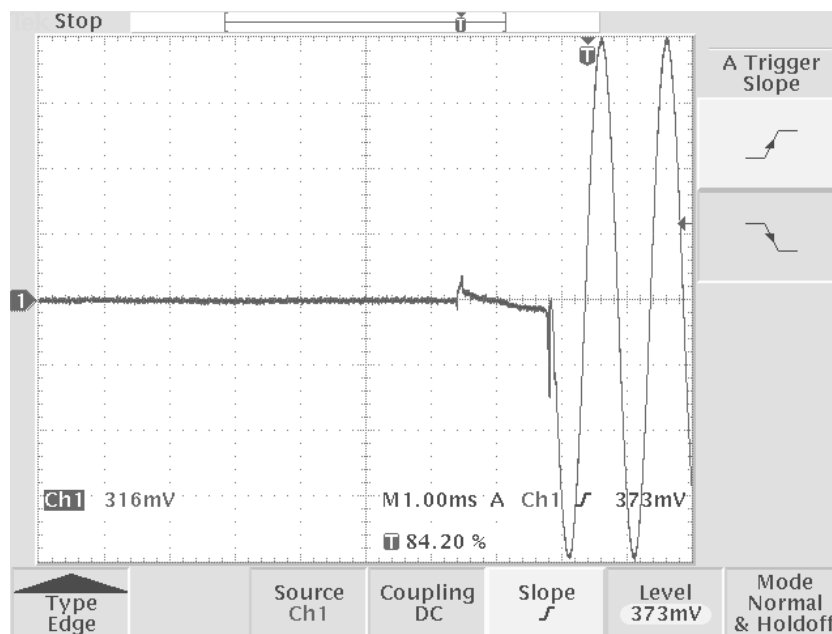


Fig. 34. Transmitter switched OFF at +40 °C. (25 kHz ch. sp.)

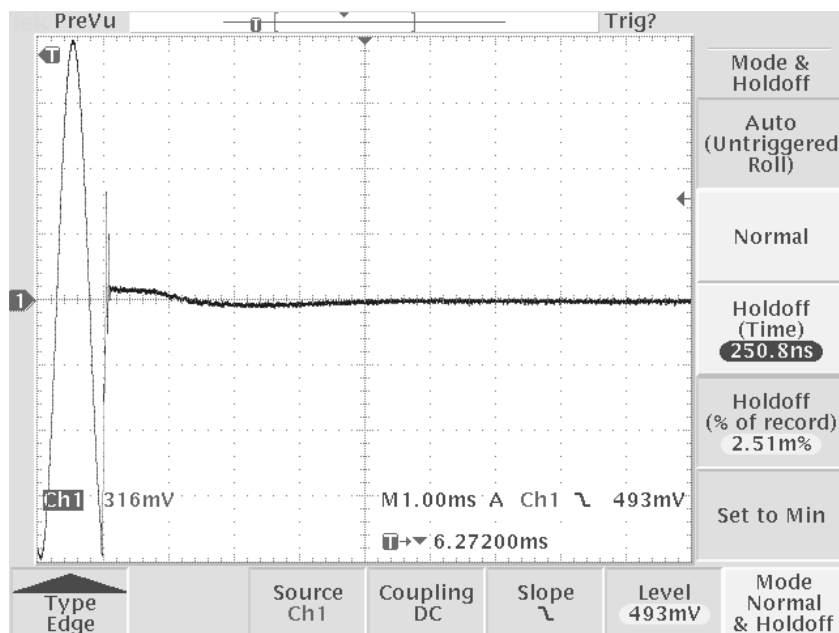


Fig. 35. Transmitter switched ON at +50 °C. (25 kHz ch. sp.)

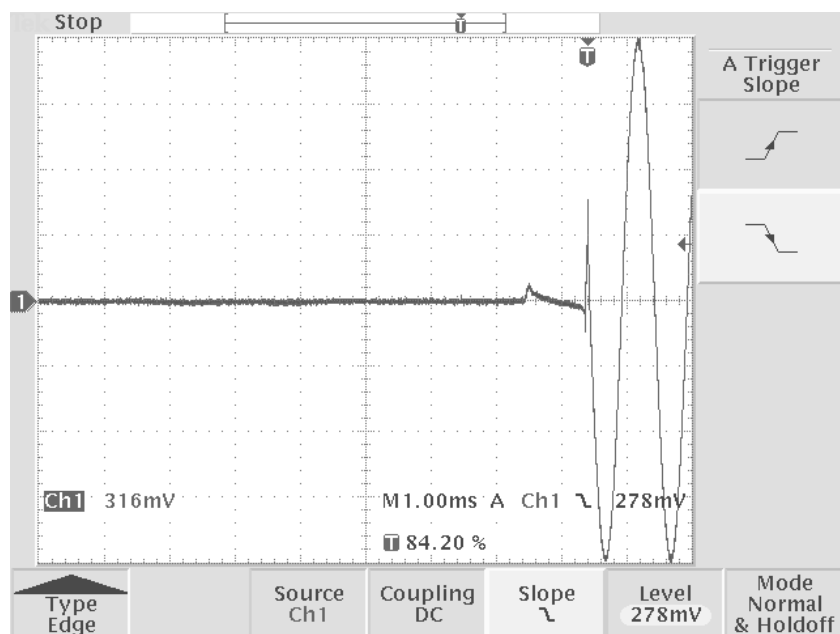


Fig. 36. Transmitter switched OFF at +50 °C. (25 kHz ch. sp.)