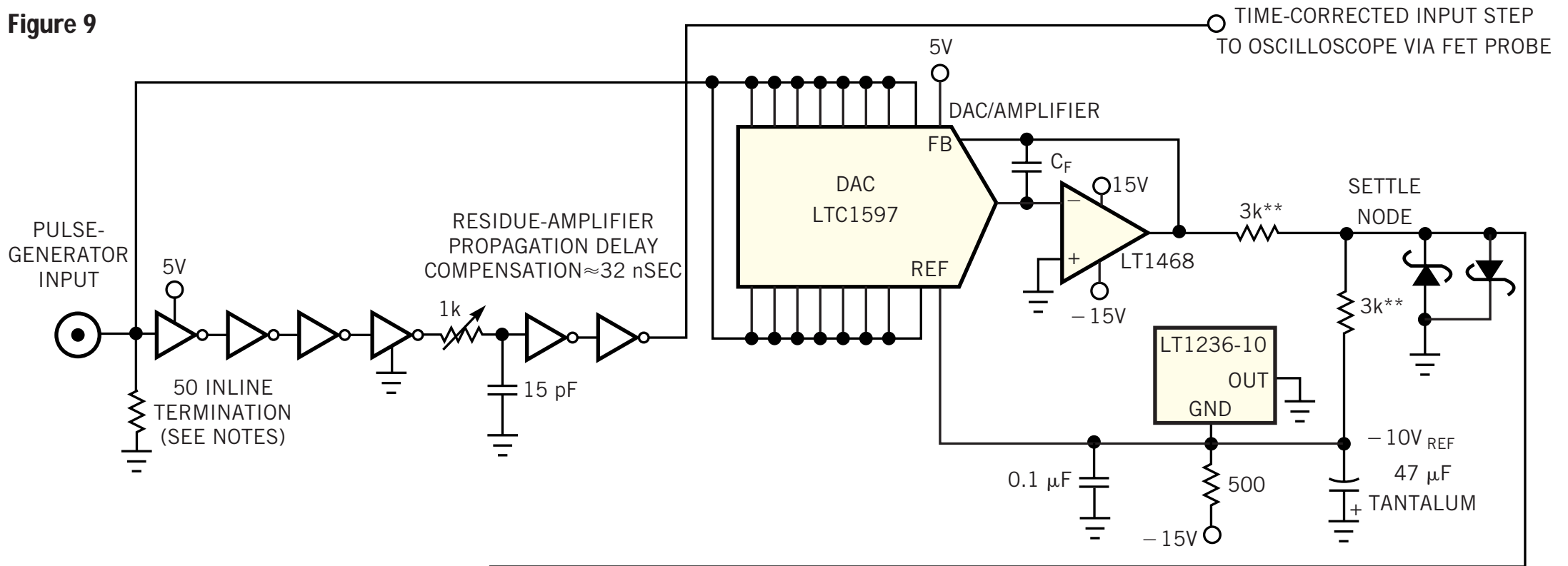


Figure 9



NOTES:

= 74HC04.

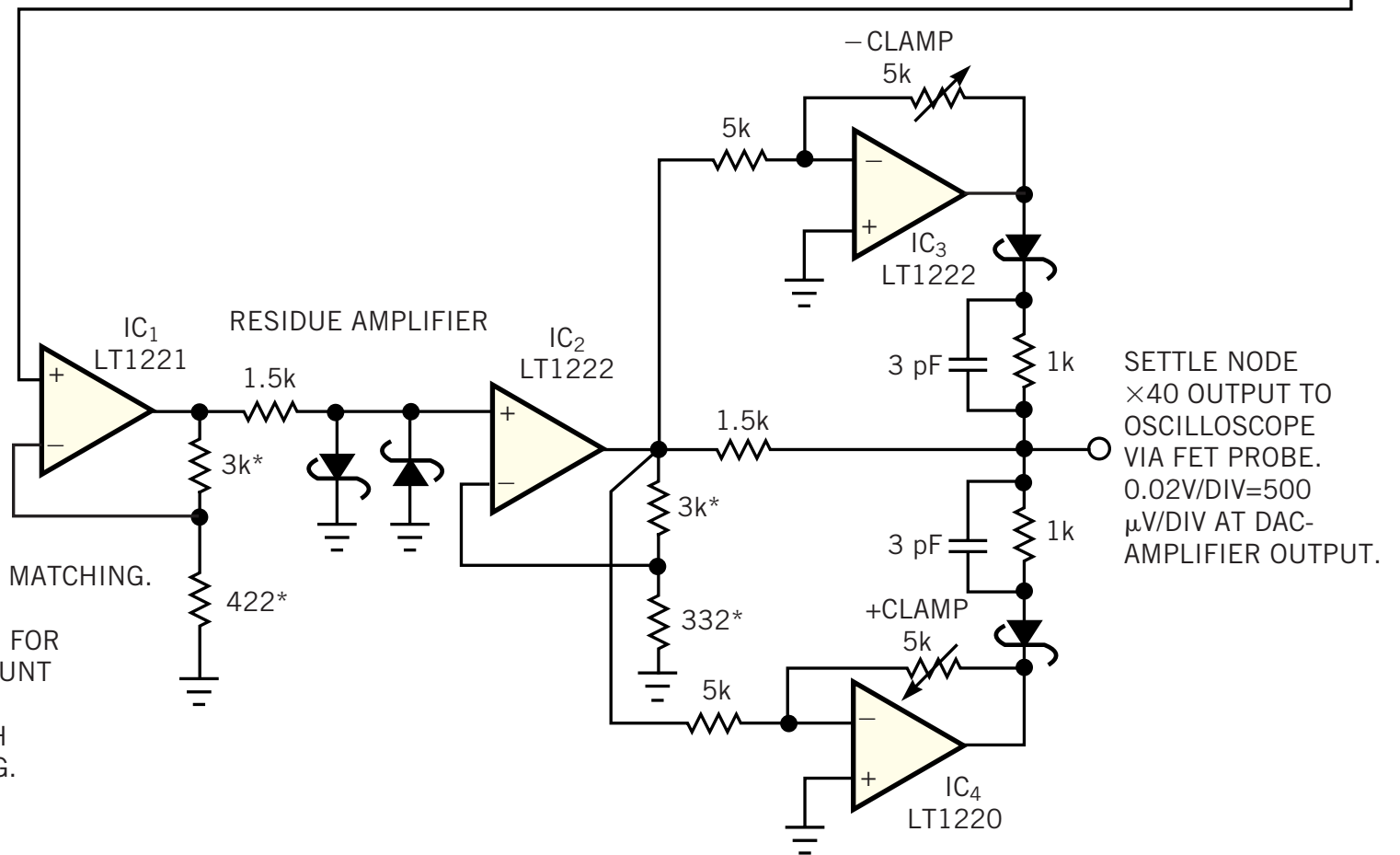
= IN4148.

\*1% FILM RESISTOR.

\*\*VISHAY VHD-200, RATIO SET: 10-PPM MATCHING. BYPASS ALL ICs.

USE INLINE COAXIAL 50Ω TERMINATOR FOR PULSE-GENERATOR INPUT. DO NOT MOUNT 50Ω RESISTOR ON BOARD.

USE SAME TYPE FET PROBES FOR BOTH OUTPUTS TO ENSURE DELAY MATCHING. CONSTRUCTION IS CRITICAL.



SETTLE NODE  
×40 OUTPUT TO  
OSCILLOSCOPE  
VIA FET PROBE.  
0.02V/DIV=500  
μV/DIV AT DAC-  
AMPLIFIER OUTPUT.

**A bootstrapped-clamp-based settling-time-measurement circuit results in a substantially lower oscilloscope overdrive than you get with the conventional diode clamp, but the oscilloscope must still tolerate  $\approx 2.5\times$  screen overdrive.**