

S E R V I C E N O T E

SUPERSEDES: 53110A-02
dated 23 January 1992

53310A Modulation Domain Analyzer

Substitute the 8082A if the 8130A is not available for the 2.5 ns Minimum Pulse Width Performance Test

Serial Numbers: 0000A00000 / 9999A99999

Duplicate Service Notes: None

To Be Performed By: Agilent-Qualified Personnel

Situation:

The Recommended Test Equipment List for the 53310A specifies the 8130A Pulse Generator. This pulse generator is required to test the 2.5 ns Minimum Pulse Width specification for Channel A. However, the 8130A is not widely available, which makes this specification difficult to verify.

Solution/Action:

A widely available pulse generator is the 8082A, which can be used as a substitute to the 8130A. The 8082A is specified to generate pulse widths as narrow as 2.4 ns.

The 8082A substitutes well into the existing procedures for the 2.5 ns Minimum Pulse Width Test for Channel A, pages 2-33 through 2-35, Test 6A, in manual part number

Continued

DATE: 23 JANUARY 1992

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		
INFORMATION ONLY		
AUTHOR:	ENTITY:	ADDITIONAL INFORMATION:
MDM	0200	53310A Service Manual, Part Number 53310-90005

53310-90005. Figure 2-8 shows the equipment setup for the Minimum Pulse Width Test using an 8130A. The 8082A is a direct substitute. The 355C Step Attenuator will still be required to achieve the 75mVp-p requirement at the Channel A Input, as mentioned in the note to step 2 on page 2-34. Use the 50 ohm Positive Output of the 8082A.

Select the narrowest Pulse Width setting on the 8082A and adjust the vernier CCW. Use an oscilloscope to verify that the 8082A is generating a signal as close as possible to 75mVp-p, 2.5 ns pulse width, at a 10 MHz rate. Adjust the 8082A front panel settings and 355C Step attenuator to achieve this.

Follow steps 3 through 12 exactly as outlined on pages 2-34 and 2-35. If desired, the 8161A Pulse Generator can be used for Tests 6B and 6C, the Channel B and Ext Arm Input Minimum Pulse Width Tests.