

DATE	1/27/65	TMC SPECIFICATION NO. S 339	C
SHEET COVER	OF 4		
RBY COMPILED	MM CHECKED	TITLE:	
APPROVED	<i>RJR</i>		

SWITCHING FILTER PANEL
SFP-2 TEST PROCEDURE

TMC SPECIFICATION

NO. S 339

REV: C

COMPILED: R. YOUNG

CHECKED:

APPD:

SHEET 1 OF 4

TITLE: SFP-2 SWITCHING FILTER PANEL TEST PROCEDURE

A. TEST EQUIPMENT REQUIRED

1. AC VTVM - Ballantine 310A or equivalent.
2. Audio Signal Generator - Hewlett Packard 200CD or equivalent.
3. 600 Ohm - $\frac{1}{2}$ watt carbon resistor, 1 each.

B. INSTRUMENT LAYOUT

1. For CHANNEL 1, connect test equipment as shown in Figure 1:
 - a. 600 Ohm load across terminals 3 and 4 of E101.
 - b. Ballantine across 600 ohm load and switch meter to 1 volt range. Terminal 3 is the ground side.
 - c. Output of signal generator to terminals 1 and 2 of E101. Terminal 2 is the ground side.

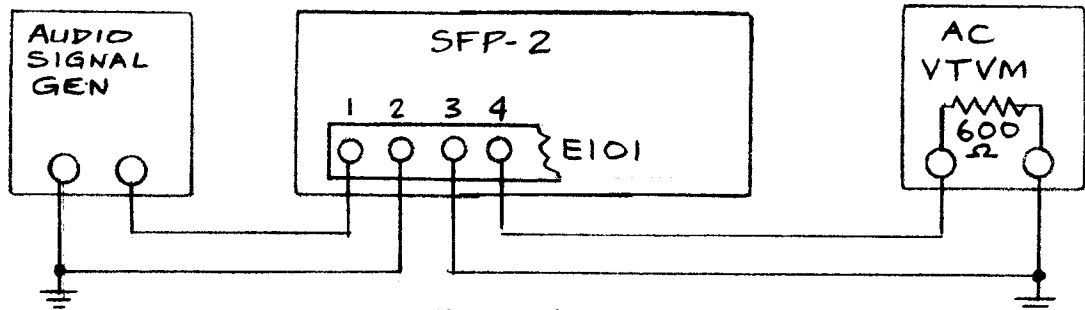


Figure 1.

2. For CHANNEL 2, connect test equipment as shown in Figure 2:
 - a. 600 Ohm load across terminals 8 and 9 of E101.
 - b. Ballantine across 600 ohm load and switch meter to 1 volt range. Terminal 8 is the ground side.
 - c. Output of signal generator to terminals 6 and 7 of E101. Terminal 7 is the ground side.

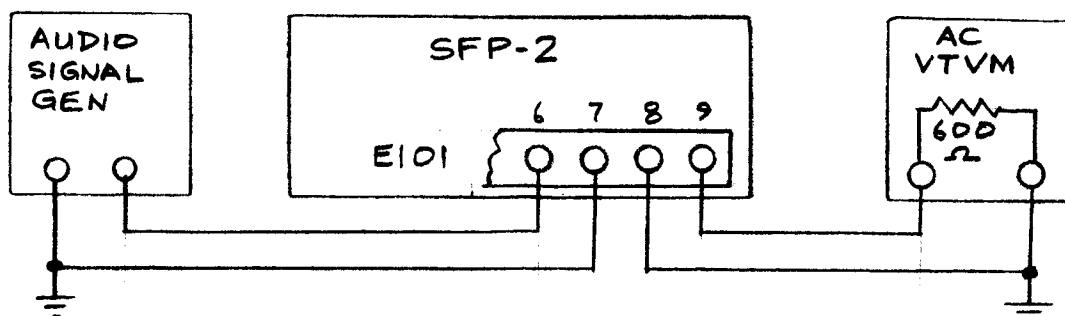


Figure 2.

TMC SPECIFICATION

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TITLE: SFP-2 SWITCHING FILTER PANEL TEST PROCEDURE

C. TEST PROCEDURE

1. Check unit for mechanical defects.
2. Check unit for cold joints, loose wires.
3. Set CHANNEL 1 switch to FILTER OUT position.
4. Set signal generator to 2125 cps, and the gain control for a 1.0 VAC reading on the Ballantine.
5. Set CHANNEL 1 switch to PANEL OUT position. The meter should indicate an open circuit.
6. Set CHANNEL 1 switch to FILTER IN position, measure and record the drop from the 1.0 VAC reference level in Step 4. This drop should not exceed -7DB. Readjust gain control for a reading of 1.0 VAC on the meter.
7. Measure and record the drop from the 1.0 VAC reference level in Step 6, with the signal generator set as follows:
 - a. 2225 cps, no more than -3DB down.
 - b. 2025 cps, no more than -3DB down.
 - c. 2465 cps, at least -40DB down.
 - d. 1785 cps, at least -40DB down.
8. Reset meter to 1.0 VAC range, set CHANNEL 1 switch to FILTER OUT position.
9. Set signal generator to 2975 cps, and the gain control for a 1.0 VAC reading on the meter.
10. Set CHANNEL 1 switch to FILTER IN position, measure and record the drop from the 1.0 VAC reference level in Step 9. This drop should not exceed -7DB. Readjust gain control for a reading of 1.0 VAC on the meter.
11. Measure and record the drop from the 1.0 VAC reference level in Step 10, with the signal generator set as follows:
 - a. 3100 cps, no more than -3DB down.
 - b. 2850 cps, no more than -3DB down.
 - c. 3450 cps, at least -45DB down.
 - d. 2500 cps, at least -45DB down.

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12. Disconnect test set-up from terminals 1, 2, 3, and 4 of E101, and re-connect test set-up according to Section B.2.
13. Repeat Steps 3 to 11 with CHANNEL 2 switch.

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SHEET 4 OF 4

TITLE: SFP-2 SWITCHING FILTER PANEL TEST PROCEDURE

TEST DATA SHEET

Mfg. No. _____

Serial No. _____

1. Mechanical Check _____

2. Wiring Check _____

	CHANNEL 1	CHANNEL 2
3. FILTER OUT POSITION	_____ OK	_____ OK
4. PANEL OUT POSITION	_____ OK	_____ OK
5. FILTER IN POSITION insertion loss not more than 7db @ 2125 CPS.	_____ db	_____ db
6. FILTER IN POSITION 2225 CPS not more than 3db down.	_____ db	_____ db
7. FILTER IN POSITION 2465 CPS not less than 40db down.	_____ db	_____ db
FILTER IN POSITION 1785 CPS not less than 40db down.	_____ db	_____ db
8. FILTER IN POSITION insertion loss not more than 7db @ 2975 CPS.	_____ db	_____ db
9. FILTER IN POSITION 3100 CPS not more than 3 db down.	_____ db	_____ db
FILTER IN POSITION 2850 CPS not more than 3db down.	_____ db	_____ db
10. FILTER IN POSITION 3450 CPS not less than 45db down.	_____ db	_____ db
FILTER IN POSITION 2500 CPS not less than 45db down.	_____ db	_____ db

TESTER _____

DATE _____