

DATE 20/8/1959  
 SH. 1 OF 1  
 COMPILED BY

TMC SPECIFICATION NO. S - 10025

TITLE: PRODUCTION TEST OF TR-001 TRANSFORMER

JOB

APPROVED

**PURPOSE:** The purpose of this specification is to establish a test procedure for the production testing of the TR-001 transformer.

**MATERIALS REQUIRED:** Test signal generator operating at 2,8, and 32 mc. having an adjustable output of 1 volt.

Special jig for transformer testing which allows simple, low loss connections for proper termination.

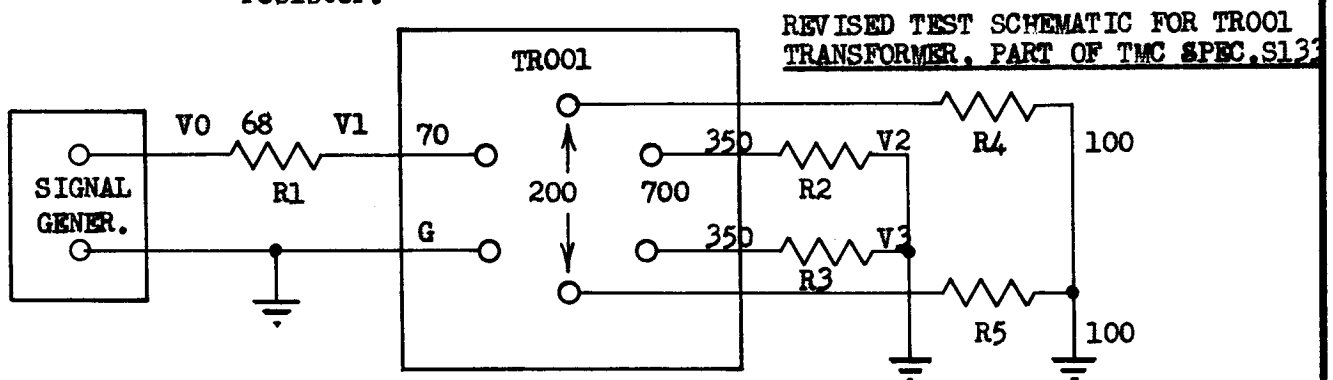
Vacuum tube voltmeter with R.F. probe.

Voltage Data Sheets.

**PROCEDURE:** The test of the TR-001 transformer consists of inserting a series of R.F. frequencies from a 70 ohm source to the 70 ohm output taps of the transformer. Impedance transformation is to be verified by a number of voltage readings taken when the input impedance is terminated in 200 and 700 ohms, both of which are balanced to ground.

The test may be considered to be divided into two parts. The first consists in terminating the 700 ohm impedance and recording the voltages. The second consists in terminating the 200 ohm impedance and recording the voltages.

Connect the test equipment as shown in the diag. below. The proper termination is selected by clipping on the applicable resistor.



NOTE, THAT BOTH 200 OHM AND 700 OHM OUTPUTS ARE CENTER TAPPED TO GROUND.

R1 = 68 ohm NR 1%  
 R2 = 350 ohm NR 1%  
 R3 = 350 ohm NR 1%  
 R4 = 100 ohm NR 1%  
 R5 = 100 ohm NR 1%

Freq. Mcs.	700 ohm Termination			200 ohm Termination				
	V0	V1	V2	V3	V0	V1	V4	V5
2.0	1.0	.45	.60	.60	1.0	.45	.35	.34
8.0	1.0	.50	.70	.70	1.0	.50	.39	.40
32.0	1.0	.53	.74	.83	1.0	.55	.45	.48

TOLERANCES SHALL BE  $\pm 0.1$  VOLT - V1 SHALL BE SET TO THE SAME VALUE AS V1 IN ABOVE CHART.