

DATE 6/2/63

SH. 1 OF 3

COMPILED BY

TMC SPECIFICATION NO. S-10078-A

TITLE:

JOB

APPROVED

TEST SPECIFICATION

FOR

TRANSFORMER TR-155

T.M.C. (Canada) Limited
OTTAWA ONTARIO

DATE 6/12/63
 SH. 2 OF 2
 COMPILED BY

TMC SPECIFICATION NO. S-10072-A

TITLE: TEST SPECIFICATION FOR TR-155

JOB

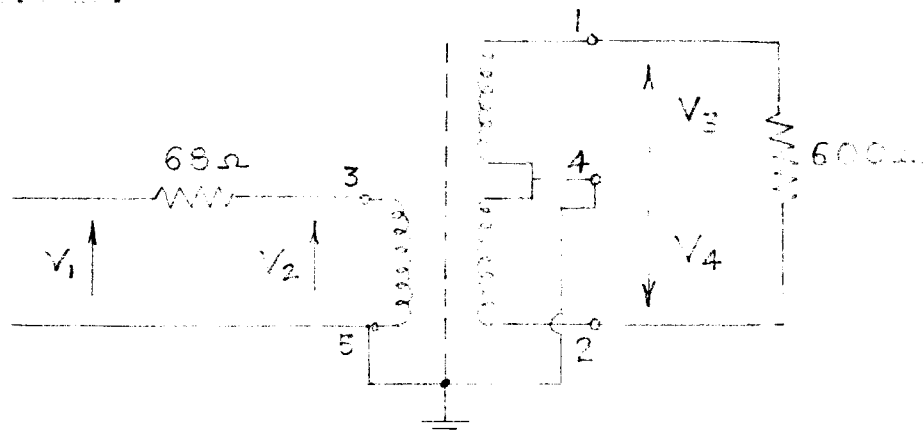
APPROVED *Wey*

VOLTAGE TEST

- (1) Feed an R.F. voltage from a signal generator Measurement Model 82 or equivalent, through a series 68 ohm resistor to terminal 3 of the secondary. Ground terminal 5 of the secondary.
- (2) Terminal 4, the C.T. of the primary is also to be connected to ground. Connect a 600 ohm resistor across the primary, terminals 1 & 2.
- (3) Measuring with a V.T.V.M., Hewlett - Packard Model 410-B or equivalent, set V_1 from the signal generator to 1.0 volt.
- (4) Measure V_3 on terminal 3, V_2 on terminal 1, and V_4 on terminal 2.
- (5) The following table and note apply to the transformer after potting. Values measured before potting may be slightly higher.

FRE. KCY/S	A. F. VOLTS							
	V_1	V_2	TOL.	V_3	TOL.	V_4	TOL.	
2	1.0	0.40 ±	.02	0.715 -	.02	0.715 -	.02	
4	1.0	0.40 ±	.02	0.715 ±	.02	0.715 ±	.02	
6	1.0	0.40 ±	.02	0.69 ±	.02	0.69 ±	.02	
10	1.0	0.40 ±	.02	0.67 ±	.02	0.67 ±	.02	
20	1.0	0.39 ±	.02	0.59 +	.04	0.59 +	.04	

NOTE: Upper limit for V_3 and V_4 set at 0.715 for 20K, and lower limit set at 0.59 for 30 Kc. to ensure flatness of response of 1.5 db. Occasionally a transformer may have better output than 0.715 in which case, the response over the frequency range is to be calculated to determine if within 1.5 db.



V_2 Theoretical: 0.5
 V_3 & V_4 Theoretical: 0.75

DATE 6/3/63
 SH. 3 OF 3
 COMPILED BY

TMC SPECIFICATION NO. S-10070-A

TITLE: TEST SPECIFICATION FOR IR-155

JOB

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BALANCE/UNBALANCE TEST

- (1) The transformer secondary (terminals 3 & 5) is terminated in 68 ohms.
- (2) The C.T. of the primary (terminal 4) is grounded. The signal generator is set at 100 microvolts (V_1) and the signal injected through a series 100 ohm resistor to terminal 1 of the primary.
- (3) The antenna input of a communications receiver is connected across the 68 ohm transformer load using coaxial cable to connect from the resistor to the receiver.
- (4) The receiver is tuned and adjusted to give a suitable reference level as indicated on a meter connected to the receiver output.
- (5) Terminals 1 and 2 of the transformer primary are joined and the signal generator output increased (V_2) to regain the reference level of the receiver.

FREQ. MC/S	R. F. MICROVOLTS			B/U RATIO MINIMUM
	V_1	V_2 Typical	V_2 Minimum	
2	100	100,000	100,000	60 dB
4	100	120,000	70,000	57
8	100	30,000	35,000	50
16	100	40,000	20,000	46
24	100	25,000	13,000	42
30	100	20,000	10,000	40

NOTE: Ratio of V_2 MINIMUM to V_1 set to correspond with B/U RATIO MINIMUM.

NOTE: Above 20 MC/S, readings are critical and dependent on adequate isolation between signal generator cable and receiver cable. A grounded shield to isolate generator leads from receiver leads at the transformer terminals may be necessary.

