| REV NO. OX 1 | | TITLE | CONT ON SHEET 2 | SH NO. 1 |

| 224X705AA | | TAPERED CURRENT LIMIT DC-3032R TEST INSTRUCTION | |

| CONT ON SHEET 2 SH NO. 1 | FIRST MADE FOR 193X266AAG01 |

REVIS:

1.0 SCOPE

This instruction covers the procedure for production testing the subject card. Its performance capabilities are covered in Engrg. Spec 224X358AA.

2.0 INSTRUCTIONS

2.01 Varify that all components and circuit connections are properly in place.

2.02 Power Supply. Monitor the voltage at test points +18 and -18. The voltage shall be +18.4 to +19.7 respectively.

2.03 Tach Spillover

2.03.1 Adjust P270 fully CCW. Tie tab 5 to common.

2.03.2 Apply -4.5 volts DC at tab 9. Voltage at test point TSO shall be zero.

2.03.3 Apply +8.0 volts DC at tab 9. Voltage at test point TSO shall be +8.7 to +10.8 volts DC. 9.0

2.03.4 Adjust P270 fully CW.

2.03.5 Apply +50. volts DC at tab 9. Voltage at test point TSO shall be zero.

2.03.6 Apply -100V DC at tab 9. Voltage at test point TSO shall be +8.7 to +10.8 volts DC. Open tab to common connection.

2.04 Current Limit Reference

2.04.1 Monitor test point +CL. Adjust current limit pot P271 and varify that voltage at +CL can be adjusted from +2.5 to +11.

2.04.2 Adjust pot 271 until +CL is 10.0 volts. Voltage at test point -CL shall be the same magnitude as at +CL, +250 milli-volts but opposite in polarity.

2.04.3 At the initial levels of 2.04.2 and 2.03.6, connect tab 5 to tab 23. The voltage at test point +CL shall now be +1.6 to +3.4 volts DC. Remove jumper. -2.49 -2.50

2.05 Current Spillover Circuit and Error Limit

2.05.1 Adjust P271 until +CL is 5.0 volts DC. Tie tab 21 to common.

2.05.2 Apply ±8.5 volts at tab 10. Voltage at test point ISO shall be zero for both conditions.

2.05.3 Apply +12.4 volts at tab 10. Voltage at test point ISO shall be +1.6 to +11.2 volts (respectively).

2.05.4 Apply a voltage at tab 14 at +5.2V DC. The voltage at tab 22 should be +0.2 to +1.0 respectively. Remove voltage at tab 14 after completion of this test. +.55v

2.06 Lockouts

tab 28

2.06.1 Tie/ to common. Place 100K at tab 26 to common. Voltage at 26 shall be zero. Voltage at test point LO should be less than zero (slightly negative). -3.0v

2.06.2 Apply +10.0 volts at tab 21. Short circuit current measured out of tab 22, shall be 1.46, +.05 milliamperes. 1.456 ma

2.06.3 Apply +30V at tab 27. Voltage at tab 26 shall be +20 to +30V. 23.7 Apply -30V at tab 27. Voltage at tab 26 shall be +.1V or less -.0005

5D (B'
5E (B'
5K (B'
5L (B'
5P (B'
5QC (
5R (B'
PRINT

| MADE BY HJ Brown 8-17-23 | APPROVALS | SPEED VARIATOR | DIV OR DEPT. | | 224X705AA |
| ISSUED J Shepard 8-17-73 | | Erie, Pa. | LOCATION | CONT ON SHEET 2 | SH NO. 1 |

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REV NO. Ŋ 1		TITLE		CONT ON SHEET FL SH NO. 2
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CONT ON SHEET FL SH NO. 2		FIRST MADE FOR 193X266AAG01		

REVISIO

2.06.4 Open tab 28. Voltage at tab 26 shall now be less than 1 volt. Voltage at test point LO shall be +18 to 19.7 volts. 19.06

2.06.5 Apply +10.0 volts at tab 21. Short circuit current measured out of tab 22 shall be less than +100 18.9 µA microamperes (respectively).

3.0 CONDITIONS

3.01 Voltage: +30V DC, +3V DC
+20V DC, +0.4V DC

3.02 Ambient temperature: room temperature.

4.0 REQUALIFICATION

This card should be requalified every 18 months or 400 production units, whichever occurs first.

Chg 2.06.4 11/1/73

1

5D (BW
5E (BW
5K (BW
5L (BW
5P (BW
5QC (2
5R (BW
PRINTS

MADE BY HJ Brown 8-17-73	APPROVALS	SPEED VARIATOR	DIV OR DEPT.	224X705AA
ISSUED 8-17-73		Erie, Pa.	LOCATION CONT ON SHEET FL SH NO. 2	

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CODE IDENT

GENERAL ELECTRIC

TITLE PRINTED CIRCUIT DIAGRAM
TAPERED CURRENT LIMIT

193X266AAG01

718A315

HOLE TABULATION

ALL HOLES .040 DIA. EXCEPT
THE HOLES TABULATED BELOW

LOC.	DIA.	QUAN.
A	.157	2
B	.032	70
C	.062	4

NOTES

1. INDICATED TAB NUMBERS CORRESPOND TO
   MATCHING RECEPTACLE NUMBERS
2. CROSS HATCHED TABS INDICATES TABS USED.
3. CARD SIZE, 9.500±.002 X 5.130±.002

TRANSISTOR LEAD SKETCHES

(TOP VIEW)   COLLECTOR   BASE   EMITTER

SKETCH FOR
T274

SKETCH FOR
T270, T271
T272, T273

OA LEAD SKETCH
(TOP VIEW)

SKETCH FOR
OA270, OA271,
OA272

COMPONENT HEIGHT SKETCH

OA
(SIDE VIEW)

TRANSISTOR
(SIDE VIEW)

.50 INCHES MAX.

CIRCUIT BOARD

TYPICAL MOUNTING FOR
T277 AND T278

TOP OF
PRINTED
CIRCUIT
BOARD

SPEED VARIATOR
ERIE, PA

REVISIONS

OCT 26 1972

SCALE 2X

FRONT   BACK
REAR   ETCHED   SPACE UNIT REQUIREMENT
BOARD   DWG.

General Electric elementary schematic diagram — "TAPERED CURRENT LIMIT" / "SPEED VARIATOR, ERIE PA." — drawing no. 36C7641188AA.

Visible notes:

NOTES
1. ✱ — 1% COMPENSATED RESISTORS

PROPRIETARY INFORMATION OF THE GENERAL ELECTRIC COMPANY