TAPERED CURRENT LIMIT DO-303/R TEST INSTRUCTION 1.0 SCOPE This instruction covers the procedure for production testing the subject card. Its performance capabilities are covered in Engrg. Spec 22/4X358AA. 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 Tech 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 +5.0 volts DC at tab 9. Voltage at test point TSO shall be zero. 2.03.4 Adjust P270 fully CCW. 2.03.5 Apply +5.0 volts DC at tab 9. Voltage at test point TSO shall be zero. 2.03.6 Apply -1000 DC at tab 9. Voltage at test point TSO shall be zero. 2.03.1 Apply +5.0 volts DC at tab 9. Voltage at test point TSO shall be table between the point to the point	· · · · · · · · · · · · · · · · · · ·				·						•	-
TEST INSTRUCTION 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 zero. 2.03.4 Adjust P270 fully CW. 2.03.5 Apply -100V 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 zero. 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 TSO shall be to 23. The voltage at test point HCL shall now be +1.6 to +3.4 volts DC. Remove jumper2.4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	NO. OK 1 .	4-1				ERED CUR	RENT LI	MIT DC-303	•	CONT ON SHEET	, , 2	SH NO. I
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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 whill +CL is 10.0 volts. Voltage at test point -CL shall be the same magnitude as at +CL, ±250 millivolts 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 jumper2.44 -2.20 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 ±124volts 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 14 after completion of this test. +3.57 2.06.1 Tie/to common. Place 100K at tab 26 to common. Voltage at tab 26 shall be 22 to +1.0 respectively. 2.06.2 Apply ±10.0 volts at tab 21. Short circuit current measured out of tab 22 shall be 1.46, +.05 milliamperes. (*4.5.6 m.) 2.06.2 Apply ±10.0 volts at tab 21. Short circuit current measured out of tab 22 shall be 1.46, +.05 milliamperes. (*4.5.6 m.) 2.06.3 Apply +30V at tab 27. Voltage at tab 26 shall be +2.0 to -30V. Apply *30V at tab 27. Voltage at tab 26 shall be +2.0 to -30V. Apply *30V at tab 27. Voltage at tab 26 shall be +2.0 to -30V. Apply *30V at tab 27. Voltage at tab 26 shall be +2.0 to -30V. Apply *30V at tab 27. Voltage at tab 26 shall be +2.0 to -30V. Apply *30V at tab 27. Voltage at tab 26 shall be +2.0 to -30V. Apply *30V at tab 27. Voltage at tab 26 shall be +2.0 to -30V. Apply *30V at tab 27. Voltage at tab 26 shall be +2.0 to -30V. Apply *30V at tab 27. Voltage at tab 26 shall be +2.0 to -30V. A				Apply shall	+8.0 vo	lts DC a o +10.8	volts D		at t	est poin	t TSO	
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 millivolts 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 jumper2.44 -2.60 2.05.1 Adjust P271 until +CL is 5.0 volts DC. Tie tab 21 to common. 2.05.2 Apply 2.5 volts at tab 10. Voltage at test point ISO shall be zero for both conditions. 2.05.3 Apply 124 volts at tab 10. Voltage at test point ISO shall be zero for both conditions. 2.05.4 Apply a voltage at tab 14 at +5.2V DC. The voltage at tab 12 after completion of this test. *** *** *** *** *** *** *** *** *** *				Apply	+50. vo	lts DC a		. Voltage	at t	est poin	t TSO	
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 millivolts 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 jumper2.47 -2.60 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±124 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 22 should be +0.2 to +1.0 respectively. Remove voltage at tab 14 after completion of this test. ** ** ** ** ** ** ** ** ** ** ** ** **			2.03.6	Apply	-100V D	at tab					onnecti	on.
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HJ Brown F-17-23 SPEED VARIATOR DIV OR DEPT. , 224X705AA SPEED VARIATOR DIV OR DEPT. , 224X705AA Erie, Pa. LOCATION CONT ON SHEET 2 SH NO. CODE 10			2.06.3	Annla	4.20tt at	toh 27	Walte	ing at tab	26 ch	all ha +2	10 to +3	less SR(
Erie, Pa. LOCATION CONT ON SHEET 2 SH NO. FF-803-WA (1-70) CODE 10	MADE BY HJ Bro	wn	8-17	- 23	APPROVALS	\ si	PEED VAR	IATOR		ý	224x70	05AA
		· nado	8-1	2-73	MM	1				CONT ON SHEET	2	SH NO.
	FF-803-WA (I- PRINTED IN U.	-70) S.A.	t		8 10.	A						CODE 10

TITLE CONT ON SHLET FL SH NO. 2

TAPERED CURRENT LIMIT DC-3032R

TEST INSTRUCTION

FIRST MADE FOR 193x266AAG01

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 | % ,9 u A microamperes (respectively).

3.0 CONDITIONS

REV D 1

CONT ON SHEET FL

3.01 Voltage: <u>+30V DC</u>, <u>+3V DC</u> +20V DC, +0.4V DC

3.02 Ambient temperature: room temperature.

4.0 REQUALIFICATION

224X705AA

SH NO.

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

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

REVISIO

HJ Brown 8-17-73

SPEED VARIATOR

DIV OR

224X705AA

LOCATION CONTION SHEET

FL sh No.

CODE IDENT

PRINTS

2

FF-803-WA (1-70) PRINTED IN U.S.A. Erie, Pa.



