REV NO. 1	TITLE
68A9995 76	TEST SPECIFICATIONS TRANSLATING ISOLATOR
CONT ON SHEET 2 SH NO. 1	FIRST MADE FOR IC3600AIAD1

REVISIONS

1. CURRENT MEASUREMENTS, CURRENTS ARE MEASURED USING FLOATING MILLI-VOLTMETER OF AUTOMATIC TESTERS. IN THIS TEST SPECIFICATION THE CONNECTION POINTS ARE GIVEN IN PARENTESIS AS REQUIRED.

2. VISUALLY VERIFY ESPECIALLY THE FOLLOWING COMPONENTS FOR PROPER VALUE:

R39	= 68.1Ω	R50	= 1KΩ
R40	= 82.5Ω	R63	= 39.2K
R41	= 56.2Ω	R64	= 22.1K
R55	= 2.21K	R77,R78	= 1Ω
R43	= 100Ω	R62	= 15K
R44	= 150Ω		

3. ISOLATION - WITH OHMETER ON RX10,000 VERIFY:

PIN 3 TO PIN 26 READS INFINITY
PIN 3 TO PIN(12) READS INFINITY
PIN 26 TO PIN(12) READS INFINITY
USE BOTH POLARITIES OF OHMMETER

4. INVERTER TEST - POWER SUPPLY CHECK TURN POT R70 FULL CW.

A. APPLY 28 VOLTS TO PIN 26 WITH COM ON PIN 25.

B. VERIFY PIN (22) TO PIN 25 HAS A SQUARE WAVE OF 53V TO 59V AMPLITUDE AND frq. of 2.125-2.875 KHZ (348-470us).

C. PIN (49) TO PIN 3 IS +(14.5 TO 16.6V) D.C.
PIN (38) TO PIN 3 IS -(13.2 TO 14.5 VOLTS) D.C.
PIN (32) TO PIN 3 IS +(5.9 TO 6.5V) D.C.

REMOVE POWER TURN R70 FULL CCW, AND R71 FULL CCW, R74 FULL CCW. JUMPER PIN (37) TO (38).

5. AMPLIFIER CHECK, GAIN AND INPUT OFFSET (CLOSE S3A)

A. CONNECT G(40) TO H(47); Q(42) TO I(46); L(34) TO E(20); D(12) TO O(9). CONNECT SJ(33) THROUGH A 150K ±1% RESISTOR TO -15V (38). (CLOSE S4) (CLOSE S4A) (CLOSE S4B) (CLOSE S4C) (CLOSE S4D)

B. APPLY 28 VOLT POWER. VERIFY OUTPUT VOLTAGE G(45) TO P(40) READS 1.65 TO 2.15 VOLTS. RECORD THIS READING.

C. TURN R71 (GAIN) FULL CW. VERIFY OUTPUT VOLTAGE READS 4.2 TIMES READING IN (B) ± 10%.

1) 8/28/78 JMT
2) 7 Aug 80 JMT
3) 24 JUN 86 JMT

P6A
1338
2520

PRINTS TO

MADE BY	R.E. HANNAH	APPROVALS	INDUSTRY CONTROL DIV OR DEPT.	68A9995 76
ISSUED	8/28/78	E.G.W	SALEM, VIRGINIA LOCATION	CONT ON SHEET 2 SH NO. 1

CODE IDENT NO.

REV NO.

68A999576
CONT ON SHEET 3 SH NO. 2

TITLE
TEST SPECIFICATIONS
TRANSLATING ISOLATOR
FIRST MADE FOR IC3600AIAD1

D. TURN R70 (INPUT OFST) CW UNTIL V_O = 0 VOLTS ± 15 MV. (PIN 40 TO COM)

E. VERIFY E(20) TO F COM (4) READS LESS THAN ± 10 MV.

F. REMOVE 150KΩ RESISTOR BETWEEN SJ(33) (OPEN S4D) AND -15(V) VERIFY V_O (pin 40) GOES TO -.4 TO -.8 VOLTS. TURN R70 (INPUT OFST) CCW UNTIL V_O GOES TO 0 VOLTS ± 15 MV.

G. REMOVE POWER AND D(12) TO O(9) CONNECTION. (OPEN S4C)

6. LINEARITY CHECK

CONNECT A VOLTAGE SOURCE WITH POSITIVE ON D(12) AND NEG ON O(9). CONNECT 270Ω 2 WATT RESISTOR FROM G(40) TO P(45). (CLOSE S5)

A. WITH SOURCE SET TO 0 VOLTS ADJUST R70 (INPUT OFST) TO MAKE V_O (G TO P) READ 0 VOLTS ± 10 MV.

B. WITH SOURCE SET TO + 10 VOLTS ± 10 MV ADJUST R71 (GAIN) TO MAKE V_O (G TO P) READ + 10 VOLTS ± 10 MV.

C. SET INPUT TO + 6 VOLTS ±10 MV. VERIFY OUTPUT READS + 6 VOLTS ± 30 MV.

D. SET INPUT TO + 12 VOLTS ± 10 MV. VERIFY OUTPUT READS + 12 VOLTS ± 60 MV.

E. REDUCE INPUT TO 10.0 VOLTS.

7. CURRENT LIMIT

A. REMOVE 270Ω RESISTOR (OPEN S5) FROM G(40) TO P(45). CHECK THAT 28 VOLT SUPPLIES INPUT CURRENT IS LESS THAN 55 MA.

B. CONNECT A 250Ω VARIABLE LOAD RESISTOR FROM G TO P. (PINS 40 TO 45)

C. ADJUST LOAD RESISTOR FOR 50 MA OUTPUT CURRENT, (50MV FROM PIN 41 TO PIN 18). CHECK THAT 28 VOLT SUPPLY CURRENT IS 75 TO 95 MA. VERIFY INPUT AND OUTPUT VOLTAGES ARE 10.0 VOLTS AS SET AS SET IN STEP 5E.

D. INCREASE LOAD UNTIL VOLTAGE OUT STARTS TO COLLAPSE INDICATING CURRENT LIMIT. CURRENT SHOULD BE 65 TO 85 MA. (PIN 41 TO PIN 18).

E. SHORT CIRCUIT OUTPUT. OUTPUT CURRENT SHOULD BE LESS THAN 100 MA. (PIN 41 TO PIN 18).

F. WITH THE OUTPUT SHORTED VERIFY THATN ISOLATED ± 15V (PIN 49 AND 38 TO PIN 3) HAVE NOT DETIORATED TO LESS THAN ± 11V.

REVISIONS
1) BU16088R [illegible] 8/28/78
2) RY11604AD 2-12-79 [illegible]
3) 7MAY81 JMT
4) 24JUN81 JMT

DL22
2520

PRINTS TO

MADE BY R.E. HANNAH
ISSUED 8/28/78
APPROVALS G.G.W
INDUSTRY CONTROL DIV OR DEPT.
SALEM, VIRGINIA LOCATION

CODE IDENT NO.

FF-803 WF (11-77)
PRINTED IN U.S.A.

REV NO.	TITLE
68A999576	TEST SPECIFICATIONS TRANSLATING ISOLATOR
CONT ON SHEET FL. SH NO. 3	FIRST MADE FOR IC3600AIAD1

REVISIONS

01	MAC 2/12/79 BW1604AD
2)	JMT 24 JUN 86

G. REMOVE SHORT CIRCUIT AND VERIFY THAT OUTPUT RECOVERS AND REGULATES PROPERLY.

8. OUTPUT OFFSET ADJUSTMENT

A. REMOVE POWER AND ALL CONNECTIONS. (JUMPER J3 TO J4) (OPEN ALL SWITCHES)

B. CONNECT G(40) THROUGH 200Ω TO K(44). CONNECT Q(42) TO K(44); F(35) TO E(20); D(12) TO O(9). R(36) TO T(38), PIN 37 TO T(38). TURN POWER BACK ON. (CLOSE S7) (CLOSE S7A) (CLOSE S7B) (CLOSE S7C) (CLOSE S7D) (CLOSE S3A)

C. VERIFY OUTPUT READS LESS THAN 40μA. (PIN 41 TO PIN 18).* REMOVE REMOVE PIN (37) TO T(38) JUMPER. VERIFY OUTPUT INCREASE LESS THAN 100 MICROAMPERES. (PIN 41 TO PIN 18).* (OPEN S3A)

D. TURN POT R74 (OUT OFST) FULL CW. VERIFY OUTPUT CURRENT INCREASE TO 15 MA ± 1 MA. (PIN 41 TO PIN 18).*

E. TURN POT R74 (OUT OFST) FULL CCW. REMOVE ALL CONNECTIONS. THIS COMPLETES TEST.

9. TEST TORQUE HEAT SINKS TO FACTORY SPECIFICATIONS.

* MEASURE VOLTS AND CONVERTER DIRECTLY TO CURRENT; FOR EXAMPLE, DC VOLTMETER READS 1 MILLIVOLT BETWEEN (41) AND (18), THIS CORRESPONDS TO 1 MILLIAMP OF CURRENT FLOW.

DL22
2520

PRINTS TO

MADE BY	APPROVALS		
R.E. HANNAH	E.G.W.	INDUSTRY CONTROL (DIV OR DEPT.)	68A999576
ISSUED 8/28/78		SALEM, VIRGINIA (LOCATION)	CONT ON SHEET FL. SH NO. 3

CODE IDENT NO.