1.0 Scope

This specification covers the suggested production testing of the subject card for the performance capabilities covered in specification 224X301.

2.0 Instruction

2.1 Circuit shall be tested under the conditions of section 3.0 of this specification.

2.2 The following resistances shall be verified with a DC current source not to exceed 10 milliamperes. The current direction shall be into the first tab mentioned and out of the second tab mentioned. These measurements should be made with no other connections to the board.

2.2a 274K ohms, ± 1%. Tab 18 to tab 8
2.2b 274K ohms, ± 1%, Tab 16 to tab 8
2.2c 22.1K ohms, ± 1%, Tab 10 to tab 8
2.2d 1K ohms, ± 1%, Tab 17 to tab 8
2.2e 0 ohms, --, Tab 7 to tab 8
2.2f 2.2meg ohms, ± 10%, Tab 7 to tab 31
2.2g 120K ohms, ± 10%, Tab 2 to tab 4

2.3 a. Connect tab 17 to tab 5, tab 16 to tab 2, tab 29 to tab 30 and adjust P233, response, to maximum fully CW and P232, stability, to maximum fully CCW.
b. Voltage at tab 2 shall fall in the range of 0 to -4 volts within 2 seconds.

2.4 a. In addition to conditions of section 2.3a, connect tab 26 to tab 2 and tab 18 to tab 28.
b. Voltage at tab 2 shall fall in the range of 0 to -1 volts.

2.5 a. Adjust response pot., P233 to mid setting.
b. Adjust stability pot., P232, to maximum, fully CW.
c. Remove ties between tab 26 and tab 2 and tab 18 to tab 28.
d. Apply -.4 volts at tab 17 with respect to common at tab 5.
e. Adjust range until output is about 0 volts.
f. Change the input at tab 17 by a positive 15 millivolts. Output voltage at tab 2 (steady state) should have changed a negative voltage of between 2.9 to 4.2 volts. The time for the voltage at tab 2 to reach approximately 2/3 of the final change would range from 10 to 30 seconds.
g. Repeat section 2.5e and 2.5f except change the input at tab 17 by a minus 15 millivolts. Output value at tab 2 shall change in the positive direction by an amount between 2.9 to 4.2 volts and the time for the voltage at tab 2 to reach 2/3 of its final change shall be between 10 and 30 seconds.

2.6 Voltages from tab 28 to common should be one diode drop below voltage at tab 31 to common.

2.7 Voltage from tab 5 to tab 9 should be one diode drop below voltage from tab 5 to tab 6.

REVISIO

5E (CW)
5F (T)
50 (2)

2.8 a. The oscillator should be retested while mounted on this card and shall meet the performance requirements of section 3.0 of 224X244.

b. Output pulses may be found at tab 23.

c. Initial pulse may be applied at tab 13.

2.9 The Universal High Performance Amplifier must comply with 224X285.

3.0 Conditions

3.1 Power furnished shall be plus and minus 20 volts ±100 millivolts.

3.2 Test Temperature: Nominal room temperature of 25°C.

3.3 Warm-Up Time: 1 minute.

3.4 Initial pulse to have a magnitude no greater than 6 volts and a rise time of about 1 microsecond. A gate pulse generator card is suitable to use in this portion of the test.

SE (SW)

SE (CF)

SOC (2)

PRINTS TO