DS200TCEBG1A PROTECTION TERMINATION EXPANDER

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Filename: 200tceb.doc

1.0 APPLICABLE DOCUMENTS

Elementary Diagram: DS200TCEBG1A • Material List: DS200TCEBG1A

2.0 EQUIPMENT

2 - Digital Multi-Meters (Fluke 8050A or equiv.) -- MUST read TRUE RMS -- One across input and one monitoring output Digital Generator HP 3325A TCEB test fixture (vernier)

3.0 INSPECTION PROCEDURE

- 3.1 Verify that no shorts exist between adjacent traces.
- 3.2 Using the material list, verify that all parts shown on the silk-screen are present, and are assembled per the silk-screen.
- 3.3 Verify proper part number and mounting of T5, T6 and T7.
- 3.4 Verify that all leads are properly soldered and connections are properly filleted and clipped.

4.0 TEST PROCEDURE

4.1 Verify the following resistance between the cathode terminal of CR1, 2, or 3 (cathodes are tied together) and the points below:

411	73.7 A 1	00017 . 04017
4.1.1	JVA-1	809K to 842K
4.1.2	JVA-2	809K to 842K
4.1.3	JVA-3	809K to 842K
4.1.4	JVA-4	809K to 842K
4.1.5	JVA-5	809K to 842K
4.1.6	JVA-6	809K to 842K
4.1.7	JVA-7	809K to 842K
4.1.8	IVA-R	809K to 842K

4.2 With (-) minus lead on cathode of CR1 and Fluke meter set on 2K ohm scale, verify reading of 0.50 to 0.85 to each of the following points:

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4.2.1 JWX-1
4.2.2 JWY-1
4.2.3 JWZ-1
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4.3 Verify the resistance between each pair of points listed below:

4.3.1 JV-1	JV-2	1.220 to 1.820 Kohms
4.3.2 JV-3	JV-2	1.220 to 1.820 Kohms
4.3.3 JV-4	JV-5	1.220 to 1.820 Kohms
4.3.4 JV-6	JV-5	1.220 to 1.820 Kohms
4 3.5 JKX-11	JKX-12	16.5 to 24.9 Ohms
4.3.6 JKX-10	JKX-12	16.5 to 24.9 Ohms
4.3.7 JPU-4	JPU-5	20 to 32 Ohms
4.3.8 JPU-6	JPU-7	20 to 32 Ohms
4.3.9 JPU-8	JPU-9	20 to 32 Ohms

DISTRIBUTION LIST: PWA TEST

Note: Steps 4.4 through 4.11 are critical measurements and adjustments. Use 8050A Digital Multimeter or equivalent for all input and output measurements and in all cases make measurements and adjustments as close as possible rather than just to within the test limit.

- 4.4 Using the AC wave generator, apply 10 +/- .01 volts rms at 60 Hz between JV-1 and JV-2 (continue to monitor on Fluke 8050A or equiv. for rest of test).
- 4.5 Adjust R20 until the voltage across JMP-1 and JU-16 is .4350 +/- .0002 volts rms.
- 4.6 Attach the generator at the same setting to JV-2 and JV-3.
- 4.7 Adjust R22 until the voltage across JMP-3 and JU-16 is .4350 +/- .0002 volts rms.
- 4.8 Attach the generator at the same setting to JV-4 and JV-5.
- 4.9 Adjust R21 until the voltage across JMP-2 and JU-16 is .4350 +/ .0002 volts rms.
- 4.10 Attach the generator at the same setting to JV-5 and JV-6.
- 4.11 Adjust R23 until the voltage across JMP-4 and JU-16 is .4350 +/_ .0002 volts rms.
- 4.12 Test the beeper by applying 24 volts DC between JU-18 (+) and JU-17 (-). You may wish to hold one finger over top of the beeper so it won't sound so loud.
- 4.13 If card passes all the above tests, seal all pots and apply proper stamps.

REV	INIT	DESCRIPTION OF CHANGE	DATE COMPLETE

0	AWE	Retyped; Changed limits in 4.3	05/25/1993
I	AWE	Changed limits in 4.2	06/30/1993
2	AWE	Changed 4.3.1 - 4.3.4 to Kohms; Changed limits 4.3.5, 4.3.6 per device spec	10/03/1994
3	ADM	Retyped; Added tol. to AC input, 4.4	01/19/1995
4	JJW	Test Step 4.0.4.3 Changed tolerances due to tolerances of device which is \pm 20 %	03/29/1995
5	AWE	Changed extension from .txt	05/05/1995
6	REV	Added note prior to step 4.4 and tightened pot adjustment limits.	01/05/1996
7	REV	Added istructions at 4.13 to seal all pots	04/04/1996
8	AWE	Added instruments to step 2.0; added continual monitor to step 4.4	08/25/1997
9	AWE	Removed references to HP3455 DVM	08/27/1997