



GE Energy

Functional Testing Specification

*Parts & Repair Operations
Louisville, KY*

LOU-GED-DS3800DADB

Test Procedure for a DS3800DADB

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PREPARED BY Cristyn Edlin	REVIEWED BY R. Johnson	REVIEWED BY	QUALITY APPROVAL <i>Charlie Wade</i>
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1. SCOPE

1.1 This is a functional testing procedure for a Card.

2. STANDARDS OF QUALITY

2.1 Refer to the current revision of the IPC-A-610 standard for workmanship standards.

3. APPLICABLE DOCUMENTS

3.1 The following document(s) shall form part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue shall apply.

3.1.1 Check cards electronic folder for more information

4. ENGINEERING REQUIREMENTS

4.1 Equipment Cleaning

4.1.1 Equipment should be clean and free of debris prior to applying power unless performing an initial check. Refer to the local documented procedures for cleaning guidelines.

4.2 Equipment Inspection

4.2.1 Equipment should be visually inspected for any defects prior to applying power. This inspection should include the following as a minimum:

4.2.1.1 Wires: broken, cracked, or loosely connected

4.2.1.2 Terminal strips / connectors: broken or cracked

4.2.1.3 Components: visually damaged

4.2.1.4 Capacitors: bloated or leaking

4.2.1.5 Solder joints: damaged or cold

4.2.1.6 Circuit board: burned or de-laminated

4.2.1.7 Printed wire runs / Traces: burned or damaged

5. EQUIPMENT REQUIRED

5.1 The following equipment is required to perform the process requirements. Equipment may be substituted provided that all accuracy's and test ratios are equivalent or better.

Qty	Reference #	Description
1		Tenma 72-2080 PS (or Equivalent)
1	H188505	Fluke 5500A calibrator

6. Test Process

6.1 Setup

6.1.1.1. Install a 15k ohm input resistor in each of the saddle clamps R11 through R18.

NOTE: For all saddle clamp resistors, the input side is the side nearest the center of the card.

6.1.1.2. Adjust the power supply for +/- 15VDC rails.

6.1.1.3. Connect the common of the scope and the calibrator to the common of the power supply.

6.1.1.4. Connect common to P2.

6.1.1.5. Connect 15VDC to P1.

6.1.1.6. Connect -15VDC to P3.

6.2 Testing

6.2.1 With reference to the following table, follow steps in 6.2.2 through 6.2.4.

Input	Output
JB02	JB16
JB04	JB11
JB06	JB10
JB08	JB09
JB01	JB15
JB03	JB14
JB05	JB13
JB07	JB12

6.2.2 For each input/output combination, monitor the corresponding output with a scope.

6.2.3 Apply a 16VAC, 20Hz signal to the input.

6.2.4 As you slowly decrease the input frequency, ensure that the output amplitude increases until it the negative peaks invert and the positive peaks clip at 15Hz.

6.3 ***Test complete***

7. NOTES

7.1 None at this time.