g		GE Energy		Functional T	esting Sp	ecification			
Parts & Repair Services Louisville, KY				LOU-GED-DS200PCCAG6					
Test Procedure for a DS200PCCAG6 power connect card  DOCUMENT REVISION STATUS: Determined by the last entry in the "REV" and "DATE" column									
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#### Functional test procedure for a DS2000 Power Connect Card.

#### 1. SCOPE

1.1 This is a functional testing procedure for a DS200PCCAG6 power connect 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** GEK85769A or GEJ7301
  - **3.1.2** Check board's 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 site specific SRA's 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 or cracked
    - 4.2.1.2 Terminal strips / connectors broken or cracked
    - **4.2.1.3** Loose wires
    - 4.2.1.4 Components visually damaged
    - 4.2.1.5 Capacitors leaking
    - 4.2.1.6 Solder joints damaged or cold
    - 4.2.1.7 Circuit board burned or de-laminated
    - 4.2.1.8 Printed wire runs burned or damaged

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### 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		Fluke 85 DMM (or Equivalent)
1		100 Ohm Resistor
1		SCR firing box
1		O-Scope
1		BNC to Banana jack adapter
1		24Vdc power supply

#### 6. TESTING PROCESS

- 6.1 Visual Test
  - **6.1.1** Verify that T1F through T6F are part number 323A2335P1.
  - **6.1.2** Verify that R1, R3, R5, R7, R9 and R11 are 15-OHM 5W resistors.
- **6.2** Pulse Circuit Test (refer to drawing on next page)
  - **6.2.1** Connect 5PL22 to positive output of 24V dc power supply.
  - **6.2.2** Connect 5PL1 to NEGATIVE non-isolated connection on SCR firing box.
  - **6.2.3** Connect negative output of 24V dc power supply to COM on non-isolated side of SCR firing box.
  - **6.2.4** Connect Scope to 6FPL (Common to pin 1 and Signal to pin 2).
  - **6.2.5** Set scope Vertical to 5 V/div and Horizontal to .2 mSec/div.
  - **6.2.6** Verify SCR firing box is set to NORMAL and apply power to firing box then power supply.
  - 6.2.7 Turn output on the firing box to max and verify loaded output signal is above 10Vpp and remains steady throughout adjustment range of SCR firing box. See Figure 1 next page. Removing 100-ohm load on scope leads should allow output to increase to above 15Vpp. See chart on next page.

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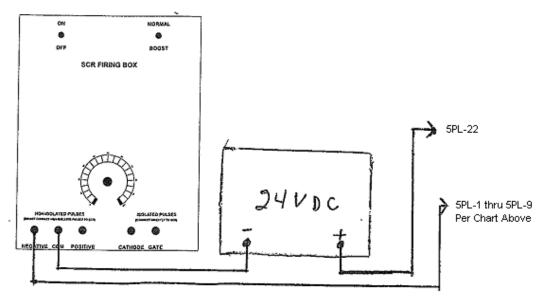
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# **6.2.8** Repeat steps 6.2.1 - 6.2.7 for circuits 5FPL – 1FPL, connections in table 1.

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Circuit	+ 24 VDC	SCR Box -	Scope +	Scope -
Under test		Firing pulse		
6FPL	5PL22	5PL1	6FPL2	6FPL1
5FPL	5PL22	5PL3	5FPL2	5FPL1
4FPL	5PL22	5PL5	4FPL2	4FPL1
3FPL	5PL22	5PL7	3FPL2	3FPL1
2FPL	5PL22	5PL9	2FPL2	2FPL1
1FPL	5PL22	5PL11	1FPL2	1FPL1

Table 1



## \*\*\*TEST COMPLETE \*\*\*

# 7. NOTES

### 7.1 See Figure 1

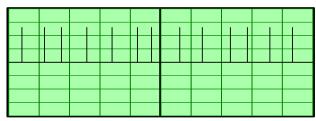


Figure 1