

ABNORMAL TEST RESULT

OF MODEL GHA300F-SNF

1. Did Cheese Cloth or Paper Glow?

No.

2. Did Ground Fuse Open?

No.

3. Dielectric breakdown?

No.

4. Other Results?

See the following pages .

(FMEA : 2/38 ~ 36/38)

(Abnormal Test Result: 37/38 ~ 38/38)

There was no emission of flame, molten metal, ignition of cheesecloth, dielectric breakdown, opening of the ground fuse, other indication of a shock or fire hazard.

F M E A

Component	Mode	Comment	Output Voltage (V)
C13	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C14	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C15	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C16	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C21	Open	Normal operation.	AVR1:**
	Short	See 37 Page.	
C22	Open	Normal operation.	AVR1:**
	Short	See 37 Page.	
C23	Open	Normal operation.	AVR1:**
	Short	See 37 Page.	
C24(opt.)	Open	Normal operation.	AVR1:**
	Short	See 37 Page.	
C25	Open	Normal operation.	AVR1:**
	Short	See 37 Page.	
C26	Open	Normal operation.	AVR1:**
	Short	See 37 Page.	
C27	Open	Normal operation.	AVR1:**
	Short	See 37 Page.	
C28	Open	Normal operation.	AVR1:**
	Short	See 37 Page.	

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Component	Mode		Comment	Output Voltage (V)
C29	Open		Normal operation.	AVR1:*
	Short		F101 (F102) opened, No hazard.	AVR1:0
C30	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
C31	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
C32	Open		Normal operation.	AVR1:*
	Short		No Hazard.	AVR1:0
C33	Open		Normal operation.	AVR1:*
	Short		No Hazard.	AVR1:0
C34	Open		Normal operation.	AVR1:*
	Short		No Hazard.	AVR1:0
C35	Open		Normal operation.	AVR1:*
	Short		No Hazard.	AVR1:0
C37	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
C53	Open	(exc._48)	Normal operation.	AVR1:*
	Short	(exc._48)	No Hazard.	AVR1:0
C54	Open	(exc._48)	Normal operation.	AVR1:*
	Short	(exc._48)	No Hazard.	AVR1:0
C57	Open	(exc._48)	Normal operation.	AVR1:*
	Short	(exc._48)	No Hazard.	AVR1:0
C58	Open		Normal operation.	AVR1:*
	Short		Output voltage decreased. No hazard.	AVR1:decreased

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Component	Mode	Comment	Output Voltage (V)
C59	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C60	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C61	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C81	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C82	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C83	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C84(opt.)	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C101	Open	Normal operation.	AVR1:*
	Short	F101 (F102) opened, No hazard.	AVR1:0
C102	Open	Normal operation.	AVR1:*
	Short	F101 (F102) opened, No hazard.	AVR1:0
C103	Open	Normal operation.	AVR1:*
	Short	F101 (F102) opened, No hazard.	AVR1:0
C106	Open	F101 (F102) opened, No hazard.	AVR1:0
	Short	F101 (F102) opened, No hazard.	AVR1:0
C108	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*

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Component	Mode	Comment	Output Voltage (V)
C109	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C110	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C111	Open	Normal operation.	AVR1:**
	Short	No Hazard.	AVR1:0
C112	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C113	Open	Normal operation.	AVR1:**
	Short	See 37 Page.	
C114	Open	Normal operation.	AVR1:**
	Short	See 37 Page.	
C115	Open	Normal operation.	AVR1:**
	Short	No Hazard.	AVR1:0
C116	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C118	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C119	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C120	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C121	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**

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Component	Mode	Comment	Output Voltage (V)
C122	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C123	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C124	Open	Normal operation.	AVR1:**
	Short	F101 (F102) opened, No hazard.	AVR1:0
C201 (opt.)	Open	Normal operation.	AVR1:**
	Short	No Hazard.	AVR1:0
C202	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C203	Open	Normal operation.	AVR1:**
	Short	No Hazard.	AVR1:0
C206	Open	Normal operation.	AVR1:**
	Short	No Hazard.	AVR1:0
C207	Open	Normal operation.	AVR1:**
	Short	No Hazard.	AVR1:0
C210	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C211	Open	Normal operation.	AVR1:**
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C212	Open	Normal operation.	AVR1:**
	Short	No Hazard.	AVR1:0
C214	Open	Normal operation.	AVR1:**
	Short	No Hazard.	AVR1:0

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Component	Mode	Comment	Output Voltage (V)
C215	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C216	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C217	Open	Normal operation.	AVR1:**
	Short	No Hazard.	AVR1:0
C218	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C219	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C220	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C221	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C222	Open	Normal operation.	AVR1:**
	Short	No Hazard.	AVR1:0
C223	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C224	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C225	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C226	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**

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Component	Mode	Comment	Output Voltage (V)
C227	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C228	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C229	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C230	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C231	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	Normal operation.	AVR1:*
C232(opt.)	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C233	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C501	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C502(opt.)	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C504	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C505	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C506	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased. No hazard.	AVR1:decreased

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Component	Mode	Comment	Output Voltage (V)
C507	Open	Normal operation.	AVR1:**
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C508	Open	Normal operation.	AVR1:**
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C509	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C514	Open	Normal operation.	AVR1:**
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C520	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C521	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C701(opt.)	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C702	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C703	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C704	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C705	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C706	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**

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Component	Mode	Comment	Output Voltage (V)
C707	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C708	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C709	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C710	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C711	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C712	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C713	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C714	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C715	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C716	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C801	Open	Normal operation.	AVR1:**
	Short	No Hazard.	AVR1:0
C802	Open	Normal operation.	AVR1:**
	Short	No Hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
D11	Open		Normal operation.	AVR1:*
	Short		See 37 Page.	
D12	Open		Normal operation.	AVR1:*
	Short		See 37 Page.	
D23	Open		Normal operation.	AVR1:*
	Short		No Hazard.	AVR1:0
D24	Open		No Hazard.	AVR1:0
	Short		Output voltage decreased. No hazard.	AVR1:decreased
D51	Open	(only_48)	Normal operation.	AVR1:*
	Short	(only_48)	Output voltage decreased. No hazard.	AVR1:decreased
D52	Open	(only_48)	Normal operation.	AVR1:*
	Short	(only_48)	Output voltage decreased. No hazard.	AVR1:decreased
D53	Open	(only_48)	Normal operation.	AVR1:*
	Short	(only_48)	Output voltage decreased. No hazard.	AVR1:decreased
D54	Open	(only_48)	Normal operation.	AVR1:*
	Short	(only_48)	Output voltage decreased. No hazard.	AVR1:decreased
D55	Open	(exc._48)	No Hazard.	AVR1:0
	Short	(exc._48)	Output voltage decreased. No hazard.	AVR1:decreased
D81	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
D101	Open		Normal operation.	AVR1:*
	Short		No Hazard.	AVR1:0
D104	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*

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Component	Mode	Comment	Output Voltage (V)
D201	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
D202	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
D203	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
D204	Open	Normal operation.	AVR1:**
	Short	No Hazard.	AVR1:0
D205	Open	Normal operation.	AVR1:**
	Short	No Hazard.	AVR1:0
D206	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
D207	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
D503	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
D504	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
D505	Open	Normal operation.	AVR1:**
	Short	No Hazard.	AVR1:0
D701	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
D702	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**

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Component	Mode		Comment	Output Voltage (V)
D703	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
FAN701	Open	1	No Hazard.	AVR1:0
		2	No Hazard.	AVR1:0
		3	No Hazard.	AVR1:0
	Short	1-2	Normal operation.	AVR1:*
		2-3	Normal operation.	AVR1:*
IC21	Open	D	No Hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		C	No Hazard.	AVR1:0
	Short	D-S	F101 (F102) opened, No hazard.	AVR1:0
		S-C	No Hazard.	AVR1:0
		C-D	F101 (F102) opened, No hazard.	AVR1:0
IC51	Open	1 (exc. _48)	Normal operation.	AVR1:*
		2 (exc. _48)	Output voltage decreased. No hazard.	AVR1:decreased
		3 (exc. _48)	Output voltage decreased. No hazard.	AVR1:decreased
		4 (exc. _48)	Normal operation.	AVR1:*
		5 (exc. _48)	Normal operation.	AVR1:*
		6 (exc. _48)	Normal operation.	AVR1:*
		7 (exc. _48)	Normal operation.	AVR1:*
		8 (exc. _48)	Normal operation.	AVR1:*
	Short	1-2 (exc. _48)	Normal operation.	AVR1:*
		2-3 (exc. _48)	Normal operation.	AVR1:*
		3-4 (exc. _48)	Normal operation.	AVR1:*

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Component	Mode		Comment	Output Voltage (V)
IC51	Short	5-6(exc._48)	Normal operation.	AVR1:**
		6-7(exc._48)	Normal operation.	AVR1:**
		7-8(exc._48)	Output voltage decreased. No hazard.	AVR1:decreased
IC52	Open	1(exc._48)	Normal operation.	AVR1:**
		2(exc._48)	Output voltage decreased. No hazard.	AVR1:decreased
		3(exc._48)	Output voltage decreased. No hazard.	AVR1:decreased
		4(exc._48)	Normal operation.	AVR1:**
		5(exc._48)	Normal operation.	AVR1:**
		6(exc._48)	Normal operation.	AVR1:**
		7(exc._48)	Normal operation.	AVR1:**
		8(exc._48)	Normal operation.	AVR1:**
	Short	1-2(exc._48)	Normal operation.	AVR1:**
		2-3(exc._48)	Normal operation.	AVR1:**
		3-4(exc._48)	Normal operation.	AVR1:**
		5-6(exc._48)	Normal operation.	AVR1:**
		6-7(exc._48)	Normal operation.	AVR1:**
		7-8(exc._48)	Output voltage decreased. No hazard.	AVR1:decreased
IC81	Open	1	Normal operation.	AVR1:**
		2	Normal operation.	AVR1:**
		3	No Hazard.	AVR1:0
		4	Normal operation.	AVR1:**
		5	No Hazard.	AVR1:0
	Short	1-2	Normal operation.	AVR1:**
		2-3	No Hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
IC81	Short	4-5	No Hazard.	AVR1:0
IC101	Open	1	F101 (F102) opened, No hazard.	AVR1:0
		2	No Hazard.	AVR1:0
		3	F101 (F102) opened, No hazard.	AVR1:0
		4	F101 (F102) opened, No hazard.	AVR1:0
		5	F101 (F102) opened, No hazard.	AVR1:0
		6	Normal operation.	AVR1:*
		7	No Hazard.	AVR1:0
		8	Normal operation.	AVR1:*
		9	Normal operation.	AVR1:*
		10	Normal operation.	AVR1:*
		11	F101 (F102) opened, No hazard.	AVR1:0
		12	No Hazard.	AVR1:0
		13	F101 (F102) opened, No hazard.	AVR1:0
		14	F101 (F102) opened, No hazard.	AVR1:0
		15	Normal operation.	AVR1:*
		16	F101 (F102) opened, No hazard.	AVR1:0
	Short	1-2	F101 (F102) opened, No hazard.	AVR1:0
		2-3	No Hazard.	AVR1:0
		3-4	Normal operation.	AVR1:*
		4-5	F101 (F102) opened, No hazard.	AVR1:0
		5-6	F101 (F102) opened, No hazard.	AVR1:0
		6-7	No Hazard.	AVR1:0
		7-8	Normal operation.	AVR1:*

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Component	Mode		Comment	Output Voltage (V)
IC101	Short	9-10	Normal operation.	AVR1:*
		10-11	No Hazard.	AVR1:0
		11-12	F101 (F102) opened, No hazard.	AVR1:0
		12-13	No Hazard.	AVR1:0
		13-14	F101 (F102) opened, No hazard.	AVR1:0
		14-15	F101 (F102) opened, No hazard.	AVR1:0
		15-16	F101 (F102) opened, No hazard.	AVR1:0
IC201	Open	1	No Hazard.	AVR1:0
		2	No Hazard.	AVR1:0
		3	No Hazard.	AVR1:0
		4	Normal operation.	AVR1:*
		5	Normal operation.	AVR1:*
		6	No Hazard.	AVR1:0
		7	No Hazard.	AVR1:0
		8	No Hazard.	AVR1:0
		9	No Hazard.	AVR1:0
		10	No Hazard.	AVR1:0
		11	No Hazard.	AVR1:0
		12	Normal operation.	AVR1:*
		13	Normal operation.	AVR1:*
		14	No Hazard.	AVR1:0
		15	No Hazard.	AVR1:0
		16	No Hazard.	AVR1:0
		17	Normal operation.	AVR1:*

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Component	Mode		Comment	Output Voltage (V)
IC201	Open	18	Normal operation.	AVR1:*
	Short	1-2	No Hazard.	AVR1:0
		2-3	No Hazard.	AVR1:0
		3-4	No Hazard.	AVR1:0
		4-5	No Hazard.	AVR1:0
		5-6	No Hazard.	AVR1:0
		6-7	Normal operation.	AVR1:*
		7-8	No Hazard.	AVR1:0
		8-9	No Hazard.	AVR1:0
		10-11	No Hazard.	AVR1:0
		11-12	Normal operation.	AVR1:*
		12-13	Normal operation.	AVR1:*
		13-14	Normal operation.	AVR1:*
		14-15	No Hazard.	AVR1:0
		15-16	No Hazard.	AVR1:0
		16-17	Normal operation.	AVR1:*
		17-18	Normal operation.	AVR1:*
IC202	Open	1	No Hazard.	AVR1:0
		2	Normal operation.	AVR1:*
		3	Normal operation.	AVR1:*
		4	Normal operation.	AVR1:*
		5	Normal operation.	AVR1:*
		6	Normal operation.	AVR1:*
		7	Normal operation.	AVR1:*

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Component	Mode		Comment	Output Voltage (V)
IC202	Open	8	Normal operation.	AVR1:**
		9	No Hazard.	AVR1:0
		10	No Hazard.	AVR1:0
		11	Normal operation.	AVR1:**
		12	Normal operation.	AVR1:**
		13	Normal operation.	AVR1:**
		14	Normal operation.	AVR1:**
		15	Normal operation.	AVR1:**
		16	Normal operation.	AVR1:**
		17	Normal operation.	AVR1:**
		18	Normal operation.	AVR1:**
		19	Normal operation.	AVR1:**
		20	Normal operation.	AVR1:**
	Short	1-2	No Hazard.	AVR1:0
		2-3	Normal operation.	AVR1:**
		3-4	Normal operation.	AVR1:**
		4-5	Normal operation.	AVR1:**
		5-6	Normal operation.	AVR1:**
		6-7	Normal operation.	AVR1:**
		7-8	Normal operation.	AVR1:**
		8-9	No Hazard.	AVR1:0
		9-10	No Hazard.	AVR1:0
		11-12	Normal operation.	AVR1:**
		12-13	Output voltage decreased. No hazard.	AVR1:decreased

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Component	Mode		Comment	Output Voltage (V)
IC202	Short	13-14	Output voltage decreased. No hazard.	AVR1:decreased
		14-15	Normal operation.	AVR1:*
		15-16	Normal operation.	AVR1:*
		16-17	No Hazard.	AVR1:0
		17-18	Normal operation.	AVR1:*
		18-19	Normal operation.	AVR1:*
		19-20	Normal operation.	AVR1:*
IC203	Open	1	Normal operation.	AVR1:*
		2	Normal operation.	AVR1:*
		3	No Hazard.	AVR1:0
		4	No Hazard.	AVR1:0
		5	No Hazard.	AVR1:0
	Short	1-2	Normal operation.	AVR1:*
		2-3	Normal operation.	AVR1:*
		4-5	Normal operation.	AVR1:*
IC501	Open	1	Normal operation.	AVR1:*
		2	Normal operation.	AVR1:*
		3	No Hazard.	AVR1:0
		4	No Hazard.	AVR1:0
		5	No Hazard.	AVR1:0
	Short	1-2	Normal operation.	AVR1:*
		2-3	Output voltage decreased. No hazard.	AVR1:decreased
		4-5	No Hazard.	AVR1:0
IC701	Open	1	Normal operation.	AVR1:*

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Component	Mode		Comment	Output Voltage (V)
IC701	Open	2	Normal operation.	AVR1:*
		3	Normal operation.	AVR1:*
		4	Normal operation.	AVR1:*
		5	Normal operation.	AVR1:*
		6	Normal operation.	AVR1:*
		7	Normal operation.	AVR1:*
		8	Normal operation.	AVR1:*
	Short	1-2	Normal operation.	AVR1:*
		2-3	Normal operation.	AVR1:*
		3-4	Normal operation.	AVR1:*
		5-6	Normal operation.	AVR1:*
		6-7	Normal operation.	AVR1:*
		7-8	Normal operation.	AVR1:*
J11	Open		F101 (F102) opened, No hazard.	AVR1:0
J101	Open		F101 (F102) opened, No hazard.	AVR1:0
L11	Open	1	F101 (F102) opened, No hazard.	AVR1:0
		2	F101 (F102) opened, No hazard.	AVR1:0
		3	F101 (F102) opened, No hazard.	AVR1:0
		4	F101 (F102) opened, No hazard.	AVR1:0
		5	F101 (F102) opened, No hazard.	AVR1:0
		6	F101 (F102) opened, No hazard.	AVR1:0
		7	F101 (F102) opened, No hazard.	AVR1:0
		8	F101 (F102) opened, No hazard.	AVR1:0
	Short	1-2	F101 (F102) opened, No hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
L11	Short	2-3	F101 (F102) opened, No hazard.	AVR1:0
		3-4	F101 (F102) opened, No hazard.	AVR1:0
		5-6	F101 (F102) opened, No hazard.	AVR1:0
		6-7	F101 (F102) opened, No hazard.	AVR1:0
		7-8	F101 (F102) opened, No hazard.	AVR1:0
L21	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
L51	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
L52	Open	(exc. _48)	No Hazard.	AVR1:0
	Short	(exc. _48)	Normal operation.	AVR1:*
L81	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
L101	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
L102	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
L104	Open		F101 (F102) opened, No hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
L105	Open		F101 (F102) opened, No hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
L201	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
L202	Open		No Hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
L202	Short		Normal operation.	AVR1:*
L701	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
PC21	Open	A, K	No Hazard.	AVR1:0
		C, E	No Hazard.	AVR1:0
	Short	A-K	Normal operation.	AVR1:*
		C-E	Normal operation.	AVR1:*
PC201	Open	A, K	Normal operation.	AVR1:*
		C, E	Normal operation.	AVR1:*
	Short	A-K	Normal operation.	AVR1:*
		C-E	No Hazard.	AVR1:0
PC202	Open	A, K	No Hazard.	AVR1:0
		C, E	No Hazard.	AVR1:0
	Short	A-K	No Hazard.	AVR1:0
		C-E	No Hazard.	AVR1:0
PC203	Open	A, K	Normal operation.	AVR1:*
		C, E	Normal operation.	AVR1:*
	Short	A-K	Normal operation.	AVR1:*
		C-E	Normal operation.	AVR1:*
PC204	Open	A, K	Normal operation.	AVR1:*
		C, E	Normal operation.	AVR1:*
	Short	A-K	Normal operation.	AVR1:*
		C-E	No Hazard.	AVR1:0
PC205	Open	A, K	Normal operation.	AVR1:*

F M E A

Component	Mode		Comment	Output Voltage (V)
PC205	Open	C, E	Normal operation.	AVR1:*
	Short	A-K	Normal operation.	AVR1:*
		C-E	No Hazard.	AVR1:0
SK101	Open		Normal operation.	AVR1:*
	Short		F101 (F102) opened, No hazard.	AVR1:0
SS11	Open		No Hazard.	AVR1:0
	Short		F101 (F102) opened, No hazard.	AVR1:0
SS12	Open	Anode (A.) J11	F101 (F102) opened, No hazard.	AVR1:0
		A, L11	F101 (F102) opened, No hazard.	AVR1:0
		Cathode (C.)	No Hazard.	AVR1:0
	Short	A, J11-C.	F101 (F102) opened, No hazard.	AVR1:0
		A, L11-C.	F101 (F102) opened, No hazard.	AVR1:0
T11	Open	1	No Hazard.	AVR1:0
		2	No Hazard.	AVR1:0
		3	Output voltage decreased. No hazard.	AVR1:decreased
		4	Output voltage decreased. No hazard.	AVR1:decreased
		5	Output voltage decreased. No hazard.	AVR1:decreased
		6	Output voltage decreased. No hazard.	AVR1:decreased
		7	Normal operation.	AVR1:*
		8	Normal operation.	AVR1:*
		9	Normal operation.	AVR1:*
	Short	1-2	F101 (F102) opened, No hazard.	AVR1:0
		3-4	Output voltage decreased. No hazard.	AVR1:decreased
		4-5	Output voltage decreased. No hazard.	AVR1:decreased

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Component	Mode		Comment	Output Voltage (V)
T11	Short	5-6	Normal operation.	AVR1:*
		7-8	Normal operation.	AVR1:*
		8-9	Normal operation.	AVR1:*
T12	Open	1	No Hazard.	AVR1:0
		2	No Hazard.	AVR1:0
		3	No Hazard.	AVR1:0
		4	No Hazard.	AVR1:0
		5	No Hazard.	AVR1:0
		6	No Hazard.	AVR1:0
		7	No Hazard.	AVR1:0
		8	No Hazard.	AVR1:0
	Short	1-2	F101 (F102) opened, No hazard.	AVR1:0
		2-3	See 37 Page.	
		3-4	No Hazard.	AVR1:0
		5-6	No Hazard.	AVR1:0
		6-7	No Hazard.	AVR1:0
		7-8	No Hazard.	AVR1:0
TH21	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
TH101	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
TR11	Open	D	See 37 Page.	
		S	See 37 Page.	
		G	See 37 Page.	

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Component	Mode		Comment	Output Voltage (V)
TR11	Short	D-S	See 37 Page.	
		S-G	See 37 Page.	
		G-D	See 37 Page.	
TR12	Open	D	See 37 Page.	
		S	See 37 Page.	
		G	See 37 Page.	
	Short	D-S	See 37 Page.	
		S-G	See 37 Page.	
		G-D	See 38 Page.	
TR21	Open	D	See 38 Page.	
		S	See 38 Page.	
		G	See 38 Page.	
	Short	D-S	See 38 Page.	
		S-G	See 38 Page.	
		G-D	See 38 Page.	
TR22	Open	D	See 38 Page.	
		S	See 38 Page.	
		G	See 38 Page.	
	Short	D-S	See 38 Page.	
		S-G	See 38 Page.	
		G-D	See 38 Page.	
TR23	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*

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Component	Mode		Comment	Output Voltage (V)
TR23	Short	C-E	No Hazard.	AVR1:0
		E-B	No Hazard.	AVR1:0
		B-C	Normal operation.	AVR1:*
TR24	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	No Hazard.	AVR1:0
		E-B	Normal operation.	AVR1:*
		B-C	No Hazard.	AVR1:0
TR51	Open	D(exc._48)	Output voltage decreased. No hazard.	AVR1:decreased
		S(exc._48)	Normal operation.	AVR1:*
		G(exc._48)	Normal operation.	AVR1:*
	Short	D-S(exc._48)	Output voltage decreased. No hazard.	AVR1:decreased
		S-G(exc._48)	Normal operation.	AVR1:*
		G-D(exc._48)	Output voltage decreased. No hazard.	AVR1:decreased
TR52	Open	D(exc._48)	Output voltage decreased. No hazard.	AVR1:decreased
		S(exc._48)	Normal operation.	AVR1:*
		G(exc._48)	Normal operation.	AVR1:*
	Short	D-S(exc._48)	Output voltage decreased. No hazard.	AVR1:decreased
		S-G(exc._48)	Normal operation.	AVR1:*
		G-D(exc._48)	Output voltage decreased. No hazard.	AVR1:decreased
TR53	Open	D(exc._48)	Output voltage decreased. No hazard.	AVR1:decreased
		S(exc._48)	Normal operation.	AVR1:*
		G(exc._48)	Normal operation.	AVR1:*

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Component	Mode		Comment	Output Voltage (V)
TR53	Short	D-S(exc._48)	Output voltage decreased. No hazard.	AVR1:decreased
		S-G(exc._48)	Normal operation.	AVR1:*
		G-D(exc._48)	Output voltage decreased. No hazard.	AVR1:decreased
TR54	Open	D(exc._48)	Output voltage decreased. No hazard.	AVR1:decreased
		S(exc._48)	Normal operation.	AVR1:*
		G(exc._48)	Normal operation.	AVR1:*
	Short	D-S(exc._48)	Output voltage decreased. No hazard.	AVR1:decreased
		S-G(exc._48)	Normal operation.	AVR1:*
		G-D(exc._48)	Output voltage decreased. No hazard.	AVR1:decreased
TR101	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	No Hazard.	AVR1:0
		E-B	Normal operation.	AVR1:*
		B-C	No Hazard.	AVR1:0
TR201	Open	C	No Hazard.	AVR1:0
		E	No Hazard.	AVR1:0
		B	No Hazard.	AVR1:0
	Short	C-E	Normal operation.	AVR1:*
		E-B	No Hazard.	AVR1:0
		B-C	Normal operation.	AVR1:*
TR701	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*

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Component	Mode		Comment	Output Voltage (V)
TR701	Short	C-E	Normal operation.	AVR1:**
		E-B	Normal operation.	AVR1:**
		B-C	Normal operation.	AVR1:**
TR702	Open	D	Normal operation.	AVR1:**
		S	Normal operation.	AVR1:**
		G	Normal operation.	AVR1:**
	Short	D-S	No Hazard.	AVR1:0
		S-G	Normal operation.	AVR1:**
		G-D	Normal operation.	AVR1:**
VR501	Open	brush	Output voltage decreased. No hazard.	AVR1:decreased
			Output voltage decreased. No hazard.	AVR1:decreased
	Short		No Hazard.	AVR1:0
ZD21	Open		Normal operation.	AVR1:**
	Short		No Hazard.	AVR1:0
ZD201	Open		Normal operation.	AVR1:**
	Short		No Hazard.	AVR1:0
ZD202	Open		Normal operation.	AVR1:**
	Short		No Hazard.	AVR1:0
ZD203	Open		Normal operation.	AVR1:**
	Short		Normal operation.	AVR1:**
ZD204	Open		Normal operation.	AVR1:**
	Short		No Hazard.	AVR1:0
ZD501	Open		Normal operation.	AVR1:**
	Short		No Hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
ZD502	Open	(exc._12)	Normal operation.	AVR1:*
	Short	(exc._12)	No Hazard.	AVR1:0
ZD503	Open	(only_48)	No Hazard.	AVR1:0
	Short	(only_48)	No Hazard.	AVR1:0
ZD701	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
002 (C220)	Open		Normal operation.	AVR1:
*002 (D205)	Open		F101 (F102) opened, No hazard.	AVR1:0
*002 (J101)	Open		No Hazard.	AVR1:0
*002 (R133)	Open		No Hazard.	AVR1:0
*003 (D104)	Open		F101 (F102) opened, No hazard.	AVR1:0
*003 (L104)	Open		F101 (F102) opened, No hazard.	AVR1:0
*003 (L105)	Open		F101 (F102) opened, No hazard.	AVR1:0
*003 (R122)	Open		No Hazard.	AVR1:0
*003 (R201)	Open		No Hazard.	AVR1:0
*003 (R211)	Open		No Hazard.	AVR1:0
003 (R87)	Open		Normal operation.	AVR1:
003 (R88)	Open		Normal operation.	AVR1:
*003 (SS12)	Open		No Hazard.	AVR1:0
*003 (TR21-G)	Open		F101 (F102) opened, No hazard.	AVR1:0
*003 (TR21-S)	Open		F101 (F102) opened, No hazard.	AVR1:0
*003 (TR22-G)	Open		F101 (F102) opened, No hazard.	AVR1:0
*004 (L51)	Open		No Hazard.	AVR1:0
*004 (R503)	Open		No Hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
*005 (CN108)	Open		Normal operation.	AVR1:**
*005 (FG)	Open		Normal operation.	AVR1:**
*005 (R36)	Open		No Hazard.	AVR1:0
R11	Open		Normal operation.	AVR1:**
R13	Open		Normal operation.	AVR1:**
R14	Open		Normal operation.	AVR1:**
R16	Open		Normal operation.	AVR1:**
R24	Open		Normal operation.	AVR1:**
R25	Open		Normal operation.	AVR1:**
R26	Open		Normal operation.	AVR1:**
R27	Open		Normal operation.	AVR1:**
R28	Open		Normal operation.	AVR1:**
R29	Open		Normal operation.	AVR1:**
R30	Open		Normal operation.	AVR1:**
R31	Open		No Hazard.	AVR1:0
R32	Open		Normal operation.	AVR1:**
R51	Open	(exc._48)	Normal operation.	AVR1:**
R52	Open	(exc._48)	Normal operation.	AVR1:**
R53	Open	(exc._48)	Normal operation.	AVR1:**
R54	Open	(exc._48)	Normal operation.	AVR1:**
R55	Open	(exc._48)	Output voltage decreased. No hazard.	AVR1:decreased
R56	Open	(exc._48)	Output voltage decreased. No hazard.	AVR1:decreased
R57	Open	(exc._48)	Normal operation.	AVR1:**
R58	Open	(exc._48)	Normal operation.	AVR1:**

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Component	Mode		Comment	Output Voltage (V)
R59	Open	(exc. _48)	Output voltage decreased. No hazard.	AVR1:decreased
R62	Open	(exc. _48)	No Hazard.	AVR1:0
R81	Open		No Hazard.	AVR1:0
R82	Open		Normal operation.	AVR1:*
R83	Open		Output voltage decreased. No hazard.	AVR1:decreased
R84	Open		No Hazard.	AVR1:0
R85	Open		No Hazard.	AVR1:0
R86	Open		No Hazard.	AVR1:0
R101	Open		Normal operation.	AVR1:*
R102	Open		Normal operation.	AVR1:*
R103	Open		Normal operation.	AVR1:*
R104	Open		Normal operation.	AVR1:*
R105	Open		Normal operation.	AVR1:*
R106	Open		No Hazard.	AVR1:0
R107	Open		No Hazard.	AVR1:0
R108	Open		No Hazard.	AVR1:0
R109	Open		No Hazard.	AVR1:0
R110	Open		F101 (F102) opened, No hazard.	AVR1:0
R111	Open		Normal operation.	AVR1:*
R112(opt.)	Open		Normal operation.	AVR1:*
R113	Open		Normal operation.	AVR1:*
R114	Open		Normal operation.	AVR1:*
R115	Open		F101 (F102) opened, No hazard.	AVR1:0
R116	Open		F101 (F102) opened, No hazard.	AVR1:0

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Component	Mode	Comment	Output Voltage (V)
R117	Open	F101 (F102) opened, No hazard.	AVR1:0
R119	Open	F101 (F102) opened, No hazard.	AVR1:0
R121	Open	F101 (F102) opened, No hazard.	AVR1:0
R122	Open	No Hazard.	AVR1:0
R123	Open	No Hazard.	AVR1:0
R124	Open	No Hazard.	AVR1:0
R125	Open	No Hazard.	AVR1:0
R126	Open	No Hazard.	AVR1:0
R127	Open	No Hazard.	AVR1:0
R128	Open	No Hazard.	AVR1:0
R129	Open	No Hazard.	AVR1:0
R130	Open	No Hazard.	AVR1:0
R131	Open	No Hazard.	AVR1:0
R132	Open	No Hazard.	AVR1:0
R133	Open	Normal operation.	AVR1:**
R134	Open	Normal operation.	AVR1:**
R135	Open	Normal operation.	AVR1:**
R136	Open	Normal operation.	AVR1:**
R137	Open	Normal operation.	AVR1:**
R138	Open	Normal operation.	AVR1:**
R139	Open	Normal operation.	AVR1:**
R140(opt.)	Open	Normal operation.	AVR1:**
R201	Open	No Hazard.	AVR1:0
R202	Open	No Hazard.	AVR1:0

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Component	Mode	Comment	Output Voltage (V)
R203	Open	No Hazard.	AVR1:0
R204	Open	No Hazard.	AVR1:0
R205	Open	Normal operation.	AVR1:**
R206	Open	Normal operation.	AVR1:**
R207	Open	Normal operation.	AVR1:**
R208	Open	Normal operation.	AVR1:**
R209	Open	Normal operation.	AVR1:**
R210	Open	No Hazard.	AVR1:0
R211	Open	No Hazard.	AVR1:0
R212(opt.)	Open	Normal operation.	AVR1:**
R215	Open	Normal operation.	AVR1:**
R216	Open	Normal operation.	AVR1:**
R217	Open	Normal operation.	AVR1:**
R218	Open	Normal operation.	AVR1:**
R219	Open	No Hazard.	AVR1:0
R220	Open	No Hazard.	AVR1:0
R221	Open	No Hazard.	AVR1:0
R222	Open	Normal operation.	AVR1:**
R223	Open	No Hazard.	AVR1:0
R224	Open	Normal operation.	AVR1:**
R225	Open	No Hazard.	AVR1:0
R226	Open	Normal operation.	AVR1:**
R227	Open	Normal operation.	AVR1:**
R228	Open	Normal operation.	AVR1:**

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Component	Mode		Comment	Output Voltage (V)
R229	Open		Output voltage decreased. No hazard.	AVR1:decreased
R230	Open		Output voltage decreased. No hazard.	AVR1:decreased
R231	Open		Output voltage decreased. No hazard.	AVR1:decreased
R232	Open		Normal operation.	AVR1:**
R233	Open		Normal operation.	AVR1:**
R234	Open		Normal operation.	AVR1:**
R235	Open		No Hazard.	AVR1:0
R236	Open		Normal operation.	AVR1:**
R237	Open		Normal operation.	AVR1:**
R238	Open		Normal operation.	AVR1:**
R239	Open		Normal operation.	AVR1:**
R240	Open		Normal operation.	AVR1:**
R242	Open		No Hazard.	AVR1:0
R243	Open		No Hazard.	AVR1:0
R244	Open		Normal operation.	AVR1:**
R245	Open		No Hazard.	AVR1:0
R246	Open		Output voltage decreased. No hazard.	AVR1:decreased
R247	Open		Normal operation.	AVR1:**
R248	Open		Normal operation.	AVR1:**
R249	Open		Normal operation.	AVR1:**
R250	Open		Normal operation.	AVR1:**
R251	Open		Normal operation.	AVR1:**
R501	Open	(only_12)	Normal operation.	AVR1:**
R502	Open		Normal operation.	AVR1:**

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Component	Mode		Comment	Output Voltage (V)
R503	Open		Normal operation.	AVR1:**
R504	Open	(exc. _48)	Output voltage decreased. No hazard.	AVR1:decreased
R505	Open		No Hazard.	AVR1:0
R506	Open		No Hazard.	AVR1:0
R507	Open		Normal operation.	AVR1:**
R508	Open		Output voltage decreased. No hazard.	AVR1:decreased
R509	Open		No Hazard.	AVR1:0
R510	Open		No Hazard.	AVR1:0
R511	Open		No Hazard.	AVR1:0
R514	Open		Normal operation.	AVR1:**
R515	Open		Normal operation.	AVR1:**
R516	Open		Output voltage decreased. No hazard.	AVR1:decreased
R517	Open		Output voltage decreased. No hazard.	AVR1:decreased
R518	Open		No Hazard.	AVR1:0
R519	Open		Output voltage decreased. No hazard.	AVR1:decreased
R521(opt.)	Open		Normal operation.	AVR1:**
R522(opt.)	Open		Normal operation.	AVR1:**
R701	Open		Normal operation.	AVR1:**
R702	Open		Normal operation.	AVR1:**
R703	Open		Normal operation.	AVR1:**
R705	Open		Normal operation.	AVR1:**
R706	Open		Normal operation.	AVR1:**
R708	Open		Normal operation.	AVR1:**
R709	Open		Normal operation.	AVR1:**



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Component	Mode	Comment	Output Voltage (V)
R710	Open	Normal operation.	AVR1:*
R711(opt.)	Open	Normal operation.	AVR1:*
R714	Open	Normal operation.	AVR1:*
R715	Open	Normal operation.	AVR1:*
R801	Open	Normal operation.	AVR1:*
R802	Open	Normal operation.	AVR1:*
R901	Open	Normal operation.	AVR1:*
R902	Open	Normal operation.	AVR1:*

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
C21	Short		F101 (F102) opened, No hazard.	
C22	Short		F101 (F102) opened, No hazard.	
C23	Short		F101 (F102) opened, No hazard.	
C24(opt.)	Short		F101 (F102) opened, No hazard.	
C25	Short		F101 (F102) opened, No hazard.	
C26	Short		F101 (F102) opened, No hazard.	
C27	Short		F101 (F102) opened, No hazard.	
C28	Short		F101 (F102) opened, No hazard.	
C113	Short		F101 (F102) opened, No hazard.	
C114	Short		F101 (F102) opened, No hazard.	
D11	Short		F101 (F102) opened, No hazard.	
D12	Short		F101 (F102) opened, No hazard.	
T12	Short	2-3	F101 (F102) opened, No hazard.	
TR11	Open	D	F101 (F102) opened, No hazard.	
		S	F101 (F102) opened, No hazard.	
		G	F101 (F102) opened, No hazard.	
	Short	D-S	F101 (F102) opened, No hazard.	
		S-G	F101 (F102) opened, No hazard.	
		G-D	F101 (F102) opened, No hazard.	
TR12	Open	D	F101 (F102) opened, No hazard.	
		S	F101 (F102) opened, No hazard.	
		G	F101 (F102) opened, No hazard.	
	Short	D-S	F101 (F102) opened, No hazard.	
		S-G	F101 (F102) opened, No hazard.	

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
TR12	Short	G-D	F101 (F102) opened, No hazard.	
TR21	Open	D	No hazard.	
		S	F101 (F102) opened, No hazard.	
		G	F101 (F102) opened, No hazard.	
	Short	D-S	F101 (F102) opened, No hazard.	
		S-G	No hazard.	
		G-D	F101 (F102) opened, No hazard.	
TR22	Open	D	F101 (F102) opened, No hazard.	
		S	No hazard.	
		G	F101 (F102) opened, No hazard.	
	Short	D-S	F101 (F102) opened, No hazard.	
		S-G	No hazard.	
		G-D	F101 (F102) opened, No hazard.	