

## ABNORMAL TEST RESULT

OF MODEL CHS3002428

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 : 2/29 ~ 26/29)

( Abnormal Test Result: 27/29 ~ 29/29)

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)
C100	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C101	Open	Normal operation.	AVR1:*
	Short	External fuse opened.No hazard.	AVR1:0 [V]
C102	Open	Normal operation.	AVR1:*
	Short	External fuse opened.No hazard.	AVR1:0 [V]
C103	Open	Normal operation.	AVR1:*
	Short	External fuse opened.No hazard.	AVR1:0 [V]
C104	Open	Normal operation.	AVR1:*
	Short	External fuse opened.No hazard.	AVR1:0 [V]
C105	Open	Normal operation.	AVR1:*
	Short	External fuse opened.No hazard.	AVR1:0 [V]
C106	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C107	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C109	Open	Normal operation.	AVR1:*
	Short	See 27 Page.	
C141	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:0 [V]
C142	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:0 [V]
C151	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:0 [V]

## F M E A

Component	Mode	Comment	Output Voltage (V)
C152	Open	Output voltage decreased.No hazard.	AVR1:decreased
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C201	Open	Output voltage decreased.No hazard.	AVR1:decreased
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C202	Open	Output voltage decreased.No hazard.	AVR1:decreased
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C203	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:0 [V]
C204	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:0 [V]
C205	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:0 [V]
C301	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:0 [V]
C302	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:0 [V]
C311	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C321	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C401	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:0 [V]
C402	Open	Output voltage decreased.No hazard.	AVR1:decreased
	Short	Output voltage decreased.No hazard.	AVR1:decreased

F M E A

Component	Mode	Comment	Output Voltage (V)
C411	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C412	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C413	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C414	Open	No hazard.	AVR1:decreased or increased
	Short	No hazard.	AVR1:0 [V]
C451	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C452	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C453	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C454	Open	Output voltage decreased.No hazard.	AVR1:decreased
	Short	Normal operation.	AVR1:*
C455	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C471	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C472	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C501	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased

F M E A

Component	Mode	Comment	Output Voltage (V)
C502	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C503	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C504	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C505	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C531	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C532	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C533	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C534	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C541	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C544	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:0 [V]
C546	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:0 [V]
C547	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*

## F M E A

Component	Mode	Comment	Output Voltage (V)
C551	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C552	Open	See 27 Page.	
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C553	Open	See 27 Page.	
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C601	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C602	Open	No hazard.	AVR1:decreased or increased
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C603	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C604	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C702	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C711	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C712	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C713	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C714	Open	No hazard.	AVR1:decreased or increased
	Short	No hazard.	AVR1:decreased or increased

F M E A

Component	Mode	Comment	Output Voltage (V)
C715	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:decreased or increased
C716	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C717	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C721	Open	No hazard.	AVR1:decreased or increased
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C722	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C801	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C802	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C851	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C861	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D131	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D151	Open	See 27 Page.	
	Short	No hazard.	AVR1:0 [V]
D152	Open	Output voltage decreased.No hazard.	AVR1:decreased
	Short	Output voltage decreased.No Hazard.	AVR1:decreased

## F M E A

Component	Mode		Comment	Output Voltage (V)
D153	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
D401	Open		Output voltage decreased.No hazard.	AVR1:decreased
	Short		Output voltage decreased.No hazard.	AVR1:decreased
D411	Open		Normal operation.	AVR1:*
	Short		Output voltage decreased.No hazard.	AVR1:decreased
D452	Open		Output voltage decreased.No hazard.	AVR1:decreased
	Short		Normal operation.	AVR1:*
D541	Open		No hazard.	AVR1:0 [V]
	Short		No hazard.	AVR1:0 [V]
D543	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
D551	Open		See 27 Page.	
	Short		See 27 Page.	
D552	Open		See 27 Page.	
	Short		See 27 Page.	
D601	Open		Output voltage decreased.No hazard.	AVR1:decreased
	Short		Output voltage decreased.No hazard.	AVR1:decreased
IC141	Open	1	No hazard.	AVR1:0 [V]
		2	Normal operation.	AVR1:*
		3	Normal operation.	AVR1:*
		4	Normal operation.	AVR1:*
		5	No hazard.	AVR1:0 [V]
	Short	1-2	No hazard.	AVR1:0 [V]



## F M E A

Component	Mode		Comment	Output Voltage (V)
IC141	Short	2-3	Normal operation.	AVR1:*
		3-4	Normal operation.	AVR1:*
		4-5	No hazard.	AVR1:0 [V]
IC201	Open	1	Output voltage decreased.No hazard.	AVR1:decreased
		2	Output voltage decreased.No hazard.	AVR1:decreased
		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	Output voltage decreased.No hazard.	AVR1:decreased
		8	Output voltage decreased.No hazard.	AVR1:decreased
	Short	1-2	No hazard.	AVR1:0 [V]
		2-3	Output voltage decreased.No hazard.	AVR1:decreased
		3-4	Output voltage decreased.No hazard.	AVR1:decreased
		5-6	Output voltage decreased.No hazard.	AVR1:decreased
		6-7	Output voltage decreased.No hazard.	AVR1:decreased
IC202	Open	1	Output voltage decreased.No hazard.	AVR1:decreased
		2	Output voltage decreased.No hazard.	AVR1:decreased
		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	Output voltage decreased.No hazard.	AVR1:decreased

## F M E A

Component	Mode		Comment	Output Voltage (V)
IC202	Open	8	Output voltage decreased.No hazard.	AVR1:decreased
	Short	1-2	No hazard.	AVR1:0 [V]
		2-3	Output voltage decreased.No hazard.	AVR1:decreased
		3-4	Output voltage decreased.No hazard.	AVR1:decreased
		5-6	Output voltage decreased.No hazard.	AVR1:decreased
		6-7	Output voltage decreased.No hazard.	AVR1:decreased
		7-8	Output voltage decreased.No hazard.	AVR1:decreased
IC203	Open	1	See 27 Page.	
		2	See 27 Page.	
		3	See 27 Page.	
		4	See 27 Page.	
		5	See 27 Page.	
		6	See 27 Page.	
		7	See 27 Page.	
		8	See 27 Page.	
	Short	1-2	Output voltage decreased.No hazard.	AVR1:decreased
		2-3	Output voltage decreased.No hazard.	AVR1:decreased
		3-4	See 27 Page.	
		5-6	See 27 Page.	
		6-7	Output voltage decreased.No hazard.	AVR1:decreased
		7-8	Output voltage decreased.No hazard.	AVR1:decreased
IC401	Open	1	Normal operation.	AVR1:*
		2	No hazard.	AVR1:0 [V]
		3	Output voltage decreased.No hazard.	AVR1:decreased

## F M E A

Component	Mode		Comment	Output Voltage (V)
IC401	Open	4	Normal operation.	AVR1:*
		5	Output voltage decreased.No hazard.	AVR1:decreased
		6	Output voltage decreased.No hazard.	AVR1:decreased
		7	Output voltage decreased.No hazard.	AVR1:decreased
		8	Output voltage decreased.No hazard.	AVR1:decreased
		9	Output voltage decreased.No hazard.	AVR1:decreased
		10	Normal operation.	AVR1:*
		11	Output voltage decreased.No hazard.	AVR1:decreased
		12	No hazard.	AVR1:0 [V]
		13	No hazard.	AVR1:0 [V]
		14	Normal operation.	AVR1:*
		15	Output voltage decreased.No hazard.	AVR1:decreased
		16	Normal operation.	AVR1:*
		17	No hazard.	AVR1:0 [V]
		18	No hazard.	AVR1:0 [V]
		19	Output voltage decreased.No hazard.	AVR1:decreased
		20	Normal operation.	AVR1:*
	Short	1-2	No hazard.	AVR1:0 [V]
		2-3	Output voltage decreased.No hazard.	AVR1:decreased
		3-4	Output voltage decreased.No hazard.	AVR1:decreased
		4-5	Output voltage decreased.No hazard.	AVR1:decreased
		6-7	Output voltage decreased.No hazard.	AVR1:decreased
		7-8	Output voltage decreased.No hazard.	AVR1:decreased
		8-9	Output voltage decreased.No hazard.	AVR1:decreased

## F M E A

Component	Mode		Comment	Output Voltage (V)
IC401	Short	10-11	Output voltage decreased.No hazard.	AVR1:decreased
		11-12	Output voltage decreased.No hazard.	AVR1:decreased
		12-13	Normal operation.	AVR1:*
		13-14	Normal operation.	AVR1:*
		14-15	Output voltage decreased.No hazard.	AVR1:decreased
		16-17	Output voltage decreased.No hazard.	AVR1:decreased
		17-18	No hazard.	AVR1:0 [V]
		18-19	Normal operation.	AVR1:*
		19-20	Normal operation.	AVR1:*
IC541	Open	1	See 27 Page.	
		2	See 27 Page.	
		3	See 27 Page.	
		4	See 27 Page.	
		5	See 27 Page.	
		6	See 27 Page.	
		7	See 28 Page.	
		8	See 28 Page.	
	Short	1-2	Output voltage decreased.No Hazard.	AVR1:decreased
		2-3	See 28 Page.	
		3-4	See 28 Page.	
		5-6	Output voltage decreased.No Hazard.	AVR1:decreased
		6-7	Output voltage decreased.No hazard.	AVR1:decreased
		7-8	Output voltage decreased.No hazard.	AVR1:decreased
IC551	Open	1	See 28 Page.	

## F M E A

Component	Mode		Comment	Output Voltage (V)
IC551	Open	2	See 28 Page.	
		3	See 28 Page.	
		4	See 28 Page.	
		5	See 28 Page.	
		6	See 28 Page.	
		7	See 28 Page.	
		8	See 28 Page.	
		9	See 28 Page.	
		10	See 28 Page.	
		11	Normal operation.	AVR1:*
		12	See 28 Page.	
		13	See 28 Page.	
		14	See 28 Page.	
	Short	1-2	See 28 Page.	
		2-3	See 28 Page.	
		3-4	Output voltage decreased.No hazard.	AVR1:decreased
		4-5	Output voltage decreased.No hazard.	AVR1:decreased
		5-6	Output voltage decreased.No hazard.	AVR1:decreased
		6-7	Normal operation.	AVR1:*
		8-9	Output voltage decreased.No Hazard.	AVR1:decreased
		9-10	Output voltage decreased.No Hazard.	AVR1:decreased
		10-11	Normal operation.	AVR1:*
		11-12	Normal operation.	AVR1:*
		12-13	Output voltage decreased.No Hazard.	AVR1:decreased

## F M E A

Component	Mode		Comment	Output Voltage (V)
IC551	Short	13-14	Output voltage decreased. No Hazard.	AVR1:decreased
IC701	Open	1	Output voltage decreased. No hazard.	AVR1:decreased
		2	Output voltage decreased. No hazard.	AVR1:decreased
		3	Output voltage decreased. No hazard.	AVR1:decreased
		4	Output voltage decreased. No Hazard.	AVR1:decreased
		5	Output voltage decreased. No hazard.	AVR1:decreased
	Short	1-2	Output voltage decreased. No hazard.	AVR1:decreased
		2-3	Output voltage decreased. No hazard.	AVR1:decreased
		4-5	Output voltage decreased. No hazard.	AVR1:decreased
IC702	Open	1	Output voltage decreased. No hazard.	AVR1:decreased
		2	Normal operation.	AVR1:*
		3	Output voltage decreased. No hazard.	AVR1:decreased
		4	Normal operation.	AVR1:*
		5	Normal operation.	AVR1:*
	Short	1-2	Normal operation.	AVR1:*
		2-3	Normal operation.	AVR1:*
		4-5	Normal operation.	AVR1:*
IC703	Open	1	Output voltage decreased. No hazard.	AVR1:decreased
		2	Normal operation.	AVR1:*
		3	Normal operation.	AVR1:*
		4	Normal operation.	AVR1:*
		5	Output voltage decreased. No hazard.	AVR1:decreased
	Short	1-2	Output voltage decreased. No hazard.	AVR1:decreased
		2-3	Normal operation.	AVR1:*

## F M E A

Component	Mode		Comment	Output Voltage (V)
IC703	Short	4-5	Output voltage decreased.No hazard.	AVR1:decreased
IC851	Open	1	Normal operation.	AVR1:*
		2	Normal operation.	AVR1:*
		3	Normal operation.	AVR1:*
		4	Output voltage decreased.No Hazard.	AVR1:decreased
		5	Normal operation.	AVR1:*
	Short	1-2	Normal operation.	AVR1:*
		2-3	Normal operation.	AVR1:*
		4-5	Normal operation.	AVR1:*
PC411	Open	A, K	Output voltage decreased.No hazard.	AVR1:decreased
		C, E	Output voltage decreased.No hazard.	AVR1:decreased
	Short	A-K	Output voltage decreased.No hazard.	AVR1:decreased
		C-E	Output voltage decreased.No hazard.	AVR1:decreased
PC851	Open	A, K	Normal operation.	AVR1:*
		C, E	Normal operation.	AVR1:*
	Short	A-K	Normal operation.	AVR1:*
		C-E	Output voltage decreased.No Hazard.	AVR1:decreased
PTH861	Open		No hazard.	AVR1:0 [V]
	Short		Normal operation.	AVR1:*
R101	Open		Output voltage decreased.No hazard.	AVR1:decreased
R102	Open		Output voltage decreased.No hazard.	AVR1:decreased
R103	Open		Output voltage decreased.No hazard.	AVR1:decreased
R104	Open		Output voltage decreased.No hazard.	AVR1:decreased
R105	Open		Normal operation.	AVR1:*

## F M E A

Component	Mode	Comment	Output Voltage (V)
R106	Open	Normal operation.	AVR1:*
R107	Open	Normal operation.	AVR1:*
R108	Open	Normal operation.	AVR1:*
R121	Open	Output voltage decreased.No hazard.	AVR1:decreased
R122	Open	Output voltage decreased.No hazard.	AVR1:decreased
R131	Open	Normal operation.	AVR1:*
R132	Open	Normal operation.	AVR1:*
R133	Open	Normal operation.	AVR1:*
R134	Open	Normal operation.	AVR1:*
R135	Open	Normal operation.	AVR1:*
R136	Open	Normal operation.	AVR1:*
R141	Open	No hazard.	AVR1:0 [V]
R151	Open	See 28 Page.	
R152	Open	See 28 Page.	
R153	Open	Output voltage decreased.No hazard.	AVR1:decreased
R201	Open	Normal operation.	AVR1:*
R202	Open	Normal operation.	AVR1:*
R203	Open	Normal operation.	AVR1:*
R204	Open	Normal operation.	AVR1:*
R301	Open	No hazard.	AVR1:0 [V]
R302	Open	No hazard.	AVR1:0 [V]
R303	Open	Normal operation.	AVR1:*
R304	Open	No Hazard	AVR1:0 [V]
R311	Open	No hazard.	AVR1:0 [V]



## F M E A

Component	Mode	Comment	Output Voltage (V)
R312	Open	Normal operation.	AVR1:*
R313	Open	No hazard.	AVR1:0 [V]
R321	Open	Output voltage decreased.No hazard.	AVR1:decreased
R401	Open	Output voltage decreased.No hazard.	AVR1:decreased
R402	Open	Output voltage decreased.No hazard.	AVR1:decreased
R403	Open	Output voltage decreased.No hazard.	AVR1:decreased
R411	Open	Output voltage decreased.No hazard.	AVR1:decreased
R412	Open	Normal operation.	AVR1:*
R413	Open	No hazard.	AVR1:decreased or increased
R414	Open	Output voltage decreased.No hazard.	AVR1:decreased
R415	Open	Normal operation.	AVR1:*
R416	Open	Normal operation.	AVR1:*
R421	Open	Normal operation.	AVR1:*
R451	Open	Normal operation.	AVR1:*
R452	Open	Normal operation.	AVR1:*
R453	Open	Output voltage decreased.No hazard.	AVR1:decreased
R454	Open	Normal operation.	AVR1:*
R455	Open	Normal operation.	AVR1:*
R456	Open	Normal operation.	AVR1:*
R457	Open	Normal operation.	AVR1:*
R458	Open	Normal operation.	AVR1:*
R459	Open	Normal operation.	AVR1:*
R460	Open	Output voltage decreased.No hazard.	AVR1:decreased
R471	Open	Output voltage decreased.No hazard.	AVR1:decreased

## F M E A

Component	Mode	Comment	Output Voltage (V)
R472	Open	Normal operation.	AVR1:*
R473	Open	Normal operation.	AVR1:*
R501	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R502	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R503	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R504	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R505	Open	Normal operation.	AVR1:*
R506	Open	Normal operation.	AVR1:*
R507	Open	Normal operation.	AVR1:*
R508	Open	Normal operation.	AVR1:*
R531	Open	Normal operation.	AVR1:*
R532	Open	Normal operation.	AVR1:*
R541	Open	Normal operation.	AVR1:*
R542	Open	Normal operation.	AVR1:*
R543	Open	No hazard.	AVR1:0 [V]
R545	Open	Normal operation.	AVR1:*
R546	Open	Normal operation.	AVR1:*
R547	Open	No hazard.	AVR1:0 [V]
R548	Open	No hazard.	AVR1:0 [V]
R549	Open	Normal operation.	AVR1:*
R601	Open	Normal operation.	AVR1:*
R602	Open	Normal operation.	AVR1:*
R603	Open	Normal operation.	AVR1:*
R604	Open	Normal operation.	AVR1:*

## F M E A

Component	Mode	Comment	Output Voltage (V)
R605	Open	Normal operation.	AVR1:*
R606	Open	Normal operation.	AVR1:*
R607	Open	Normal operation.	AVR1:*
R608	Open	Normal operation.	AVR1:*
R701	Open	Output voltage decreased.No hazard.	AVR1:decreased
R711	Open	Output voltage decreased.No hazard.	AVR1:decreased
R712	Open	Output voltage decreased.No hazard.	AVR1:decreased
R713	Open	Output voltage decreased.No hazard.	AVR1:decreased
R714	Open	No hazard.	AVR1:decreased or increased
R715	Open	Normal operation.	AVR1:*
R716	Open	Output voltage decreased.No hazard.	AVR1:decreased
R717	Open	Output voltage decreased.No hazard.	AVR1:decreased
R718	Open	Normal operation.	AVR1:*
R721	Open	Output voltage decreased.No hazard.	AVR1:decreased
R722	Open	Output voltage decreased.No hazard.	AVR1:decreased
R723	Open	Output voltage decreased.No hazard.	AVR1:decreased
R724	Open	Output voltage decreased.No hazard.	AVR1:decreased
R725	Open	Normal operation.	AVR1:*
R726	Open	No hazard.	AVR1:decreased or increased
R727	Open	Normal operation.	AVR1:*
R728	Open	Normal operation.	AVR1:*
R801	Open	Output voltage decreased.No hazard.	AVR1:decreased
R802	Open	Output voltage decreased.No hazard.	AVR1:decreased
R851	Open	Normal operation.	AVR1:*

## F M E A

Component	Mode		Comment	Output Voltage (V)
R852	Open		Normal operation.	AVR1:*
R853	Open		Normal operation.	AVR1:*
R854	Open		Normal operation.	AVR1:*
R855	Open		Output voltage decreased.No hazard.	AVR1:decreased
R856	Open		Output voltage decreased.No hazard.	AVR1:decreased
R857	Open		Normal operation.	AVR1:*
R858	Open		Normal operation.	AVR1:*
R859	Open		Normal operation.	AVR1:*
R861	Open		Normal operation.	AVR1:*
TH321	Open		Normal operation.	AVR1:*
	Short		Output voltage decreased.No Hazard.	AVR1:decreased
TR101	Open	D	Output voltage decreased.No Hazard.	AVR1:decreased
		S	Output voltage decreased.No Hazard.	AVR1:decreased
		G	See 28 Page.	
	Short	D-S	See 28 Page.	
		S-G	Output voltage decreased.No Hazard.	AVR1:decreased
		G-D	Output voltage decreased.No Hazard.	AVR1:decreased
TR102	Open	D	Output voltage decreased.No Hazard.	AVR1:decreased
		S	Output voltage decreased.No Hazard.	AVR1:decreased
		G	See 28 Page.	
	Short	D-S	See 29 Page.	
		S-G	Output voltage decreased.No Hazard.	AVR1:decreased
		G-D	Output voltage decreased.No Hazard.	AVR1:decreased
TR103	Open	D	Output voltage decreased.No Hazard.	AVR1:decreased

## F M E A

Component	Mode		Comment	Output Voltage (V)
TR103	Open	S	Output voltage decreased.No Hazard.	AVR1:decreased
		G	See 29 Page.	
	Short	D-S	See 29 Page.	
		S-G	Output voltage decreased.No Hazard.	AVR1:decreased
		G-D	Output voltage decreased.No Hazard.	AVR1:decreased
TR104	Open	D	Output voltage decreased.No Hazard.	AVR1:decreased
		S	Output voltage decreased.No Hazard.	AVR1:decreased
		G	See 29 Page.	
	Short	D-S	See 29 Page.	
		S-G	Output voltage decreased.No Hazard.	AVR1:decreased
		G-D	Output voltage decreased.No Hazard.	AVR1:decreased
TR131	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	No Hazard	AVR1:0 [V]
		E-B	Normal operation.	AVR1:*
		B-C	External fuse opened.No Hazard.	AVR1:0 [V]
TR151	Open	C	Normal operation.	AVR1:*
		E	See 27 Page.	
		B	See 27 Page.	
	Short	C-E	Normal operation.	AVR1:*
		E-B	Normal operation.	AVR1:*
		B-C	Normal operation.	AVR1:*
TR451	Open	1 (1)	Output voltage decreased.No Hazard.	AVR1:decreased

## F M E A

Component	Mode		Comment	Output Voltage (V)
TR451	Open	1 (2)	Output voltage decreased.No Hazard.	AVR1:decreased
		2 (3)	Normal operation.	AVR1:*
		2 (4)	Normal operation.	AVR1:*
		2 (5)	Normal operation.	AVR1:*
		1 (6)	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	1-1 (1-2)	Output voltage decreased.No Hazard.	AVR1:decreased
		1-2 (2-3)	Output voltage decreased.No Hazard.	AVR1:decreased
		2-2 (4-5)	Normal operation.	AVR1:*
		2-1 (5-6)	Normal operation.	AVR1:*
TR452	Open	D	Normal operation.	AVR1:*
		S	Normal operation.	AVR1:*
		G	Normal operation.	AVR1:*
	Short	D-S	Normal operation.	AVR1:*
		S-G	Normal operation.	AVR1:*
		G-D	Normal operation.	AVR1:*
TR501	Open	D	Output voltage decreased.No Hazard.	AVR1:decreased
		S	Output voltage decreased.No Hazard.	AVR1:decreased
		G	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	D-S	See 29 Page.	
		S-G	Output voltage decreased.No Hazard.	AVR1:decreased
		G-D	See 29 Page.	
TR502	Open	D	Output voltage decreased.No Hazard.	AVR1:decreased
		S	Output voltage decreased.No Hazard.	AVR1:decreased
		G	Output voltage decreased.No Hazard.	AVR1:decreased

## F M E A

Component	Mode		Comment	Output Voltage (V)
TR502	Short	D-S	See 29 Page.	
		S-G	Output voltage decreased.No Hazard.	AVR1:decreased
		G-D	See 29 Page.	
TR503	Open	D	Output voltage decreased.No Hazard.	AVR1:decreased
		S	Output voltage decreased.No Hazard.	AVR1:decreased
		G	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	D-S	See 29 Page.	
		S-G	Output voltage decreased.No Hazard.	AVR1:decreased
		G-D	Output voltage decreased.No Hazard.	AVR1:decreased
TR504	Open	D	Output voltage decreased.No Hazard.	AVR1:decreased
		S	Output voltage decreased.No Hazard.	AVR1:decreased
		G	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	D-S	See 29 Page.	
		S-G	Output voltage decreased.No Hazard.	AVR1:decreased
		G-D	See 29 Page.	
TR531	Open	D	Normal operation.	AVR1:*
		S	Normal operation.	AVR1:*
		G	Normal operation.	AVR1:*
	Short	D-S	Output voltage decreased.No Hazard.	AVR1:decreased
		S-G	Normal operation.	AVR1:*
		G-D	Output voltage decreased.No Hazard.	AVR1:decreased
TR541	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*

## F M E A

Component	Mode		Comment	Output Voltage (V)
TR541	Short	C-E	No hazard.	AVR1:0 [V]
		E-B	Normal operation.	AVR1:*
		B-C	No hazard.	AVR1:0 [V]
TR542	Open	D	Normal operation.	AVR1:*
		S	Normal operation.	AVR1:*
		G	Normal operation.	AVR1:*
	Short	D-S	No hazard.	AVR1:0 [V]
		S-G	Normal operation.	AVR1:*
		G-D	Normal operation.	AVR1:*
TR601	Open	D	Normal operation.	AVR1:*
		S	Normal operation.	AVR1:*
		G	Normal operation.	AVR1:*
	Short	D-S	Output voltage decreased.No hazard.	AVR1:decreased
		S-G	Output voltage decreased.No hazard.	AVR1:decreased
		G-D	Output voltage decreased.No hazard.	AVR1:decreased
TR602	Open	D	Normal operation.	AVR1:*
		S	Normal operation.	AVR1:*
		G	Normal operation.	AVR1:*
	Short	D-S	Output voltage decreased.No hazard.	AVR1:decreased
		S-G	Output voltage decreased.No hazard.	AVR1:decreased
		G-D	Output voltage decreased.No hazard.	AVR1:decreased
TR703	Open	C	Output voltage decreased.No hazard.	AVR1:decreased
		E	Output voltage decreased.No hazard.	AVR1:decreased
		B	Output voltage decreased.No hazard.	AVR1:decreased



F M E A

Component	Mode		Comment	Output Voltage (V)
TR703	Short	C-E	Output voltage decreased.No hazard.	AVR1:decreased
		E-B	No hazard.	AVR1:decreased or increased
		B-C	Output voltage decreased.No hazard.	AVR1:decreased
TR861	Open	D	Normal operation.	AVR1:*
		S	Normal operation.	AVR1:*
		G	Normal operation.	AVR1:*
	Short	D-S	No hazard.	AVR1:0 [V]
		S-G	Normal operation.	AVR1:*
		G-D	Normal operation.	AVR1:*
ZD131	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
ZD132	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
ZD151	Open		Normal operation.	AVR1:*
	Short		See 29 Page.	
ZD311	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
ZD531	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
ZD601	Open		See 29 Page.	
	Short		Output voltage decreased.No hazard.	AVR1:decreased
ZD602	Open		See 29 Page.	
	Short		Output voltage decreased.No hazard.	AVR1:decreased
ZD721	Open		Normal operation.	AVR1:*



F M E A

Component	Mode	Comment	Output Voltage (V)
ZD721	Short	Normal operation.	AVR1:*
ZD722	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*

## ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
C109	Short		No Hazard.	AVR1:0[V]
C552	Open		Output voltage decreased. No Hazard.	AVR1:decreased
C553	Open		Output voltage decreased. No Hazard.	AVR1:decreased
D151	Open		Normal operation.	AVR1:*
D551	Open		Output voltage decreased. No Hazard.	AVR1:decreased
	Short		Output voltage decreased. No Hazard.	AVR1:decreased
D552	Open		Output voltage decreased. No Hazard.	AVR1:decreased
	Short		Output voltage decreased. No Hazard.	AVR1:decreased
IC203	Open	1	Output voltage decreased. No Hazard.	AVR1:decreased
		2	Output voltage decreased. No Hazard.	AVR1:decreased
		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	Output voltage decreased. No Hazard.	AVR1:decreased
		8	Output voltage decreased. No Hazard.	AVR1:decreased
	Short	3-4	Output voltage decreased. No Hazard.	AVR1:decreased
		5-6	Output voltage decreased. No Hazard.	AVR1:decreased
IC541	Open	1	Output voltage decreased. No Hazard.	AVR1:decreased
		2	Output voltage decreased. No Hazard.	AVR1:decreased
		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

## ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
IC541	Open	7	Output voltage decreased. No Hazard.	AVR1:decreased
		8	Output voltage decreased. No Hazard.	AVR1:decreased
	Short	2-3	Output voltage decreased. No Hazard.	AVR1:decreased
		3-4	Output voltage decreased. No Hazard.	AVR1:decreased
IC551	Open	1	Output voltage decreased. No Hazard.	AVR1:decreased
		2	Output voltage decreased. No Hazard.	AVR1:decreased
		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	Output voltage decreased. No Hazard.	AVR1:decreased
		8	Output voltage decreased. No Hazard.	AVR1:decreased
		9	Output voltage decreased. No Hazard.	AVR1:decreased
		10	Output voltage decreased. No Hazard.	AVR1:decreased
		12	Output voltage decreased. No Hazard.	AVR1:decreased
		13	Output voltage decreased. No Hazard.	AVR1:decreased
		14	Output voltage decreased. No Hazard.	AVR1:decreased
	Short	1-2	Output voltage decreased. No Hazard.	AVR1:decreased
		2-3	Output voltage decreased. No Hazard.	AVR1:decreased
R151	Open		Normal operation.	AVR1:*
R152	Open		Normal operation.	AVR1:*
TR101	Open	G	No Hazard.	AVR1:0[V]
	Short	D-S	No Hazard.	AVR1:0[V]
TR102	Open	G	No Hazard.	AVR1:0[V]

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
TR102	Short	D-S	No Hazard.	AVR1:0[V]
TR103	Open	G	No Hazard.	AVR1:0[V]
	Short	D-S	No Hazard.	AVR1:0[V]
TR104	Open	G	No Hazard.	AVR1:0[V]
	Short	D-S	No Hazard.	AVR1:0[V]
TR501	Short	D-S	Output voltage decreased.No Hazard.	AVR1:decreased
		G-D	Output voltage decreased.No Hazard.	AVR1:decreased
TR502	Short	D-S	Output voltage decreased.No Hazard.	AVR1:decreased
		G-D	Output voltage decreased.No Hazard.	AVR1:decreased
TR503	Short	D-S	Output voltage decreased.No Hazard.	AVR1:decreased
TR504	Short	D-S	Output voltage decreased.No Hazard.	AVR1:decreased
		G-D	Output voltage decreased.No Hazard.	AVR1:decreased
ZD151	Short		Normal operation.	AVR1:*
ZD601	Open		Normal operation.	AVR1:*
ZD602	Open		Normal operation.	AVR1:*