

## ABNORMAL TEST RESULT

## OF MODEL CHS4004832

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 : 2/33 ~ 31/33)

( Abnormal Test Result: 32/33 ~ 33/33)

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	See 32 Page.	
C103	Open	Normal operation.	AVR1:*
	Short	See 32 Page.	
C105	Open	Normal operation.	AVR1:*
	Short	See 32 Page.	
C109	Open	Normal operation.	AVR1:*
	Short	See 32 Page.	
C110	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C111	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C112	Open	Normal operation.	AVR1:*
	Short	See 32 Page.	
C113	Open	Normal operation.	AVR1:*
	Short	See 32 Page.	
C114	Open	Normal operation.	AVR1:*
	Short	See 32 Page.	
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



F M E A

Component	Mode	Comment	Output Voltage (V)
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]
C206	Open	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C207	Open	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C311	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C312	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C313	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C314	Open	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	Normal operation.	AVR1:*
C315	Open	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	Normal operation.	AVR1:*
C412	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C421	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*



F M E A

Component	Mode	Comment	Output Voltage (V)
C431	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]
C432	Open	No Hazard.	AVR1:0[V]
	Short	No Hazard.	AVR1:0[V]
C434	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]
C435	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]
C436	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]
C438	Open	No Hazard.	AVR1:0[V]
	Short	No Hazard.	AVR1:0[V]
C451	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]
C452	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]
C510	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C511	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C512	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C513	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased



F M E A

Component	Mode	Comment	Output Voltage (V)
C514	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C515	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C521	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C522	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C541	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C542	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C550	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]
C551	Open	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C552	Open	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C553	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C554	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C555	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]



F M E A

Component	Mode	Comment	Output Voltage (V)
C556	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]
C557	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]
C558	Open	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C559	Open	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C562	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C601	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]
C603	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]
C604	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]
C611	Open	No Hazard.	AVR1:0[V]
	Short	No Hazard.	AVR1:0[V]
C612	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]
C613	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]
C614	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]



F M E A

Component	Mode	Comment	Output Voltage (V)
C615	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]
C621	Open	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C705	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]
C710	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]
C711	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C720	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]
C721	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C722	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C723	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C724	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C725	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C733	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased



F M E A

Component	Mode	Comment	Output Voltage (V)
C741	Open	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	Normal operation.	AVR1:*
C742	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C743	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C801	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C802	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C803	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C804	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C805	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C806	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C812	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
C813	Open	No Hazard.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
D101	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*



F M E A

Component	Mode	Comment	Output Voltage (V)
D311	Open	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
D312	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
D422	Open	No Hazard.	AVR1:0[V]
	Short	Normal operation.	AVR1:*
D551	Open	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
D553	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
D554	Open	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
D555	Open	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	Output voltage decreased.No Hazard.	AVR1:decreased
D601	Open	No Hazard.	AVR1:0[V]
	Short	No Hazard.	AVR1:0[V]
D611	Open	No Hazard.	AVR1:0[V]
	Short	No Hazard.	AVR1:0[V]
D621	Open	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	Normal operation.	AVR1:*
D623	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D801	Open	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	Normal operation.	AVR1:*



F M E A

Component	Mode		Comment	Output Voltage (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
		7-8	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
		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



F M E A

Component	Mode		Comment	Output Voltage (V)
IC202	Short	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	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	Output voltage decreased. No Hazard.	AVR1: decreased
		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
IC311	Open	1	Normal operation.	AVR1: *
		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: *



F M E A

Component	Mode		Comment	Output Voltage (V)
IC311	Short	2-3	Output voltage decreased.No Hazard.	AVR1:decreased
		4-5	Normal operation.	AVR1:*
IC312	Open	1	Normal operation.	AVR1:*
		2	Normal operation.	AVR1:*
		3	Normal operation.	AVR1:*
		4	Normal operation.	AVR1:*
		5	Normal operation.	AVR1:*
	Short	1-2	No Hazard.	AVR1:0[V]
		2-3	Output voltage decreased.No Hazard.	AVR1:decreased
		4-5	Output voltage decreased.No Hazard.	AVR1:decreased
	IC411	Open	1	Normal operation.
2			Normal operation.	AVR1:*
3			No Hazard.	AVR1:0[V]
4			Normal operation.	AVR1:*
5			Normal operation.	AVR1:*
Short		1-2	Normal operation.	AVR1:*
		2-3	Normal operation.	AVR1:*
		4-5	No Hazard.	AVR1:0[V]
IC431		Open	1	No Hazard.
	2		No Hazard.	AVR1:0[V]
	3		No Hazard.	AVR1:0[V]
	4		No Hazard.	AVR1:0[V]
	5		No Hazard.	AVR1:0[V]
	6		No Hazard.	AVR1:0[V]



F M E A

Component	Mode		Comment	Output Voltage (V)
IC431	Open	7	No Hazard.	AVR1:0[V]
		8	No Hazard.	AVR1:0[V]
	Short	1-2	No Hazard.	AVR1:0[V]
		2-3	No Hazard.	AVR1:0[V]
		3-4	No Hazard.	AVR1:0[V]
		5-6	No Hazard.	AVR1:0[V]
		6-7	No Hazard.	AVR1:0[V]
		7-8	No Hazard.	AVR1:0[V]
IC501	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
		11	Output voltage decreased. No Hazard.	AVR1:decreased
		12	Output voltage decreased. No Hazard.	AVR1:decreased
		13	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
		3-4	Output voltage decreased. No Hazard.	AVR1:decreased



F M E A

Component	Mode		Comment	Output Voltage (V)
IC501	Short	4-5	No Hazard.	AVR1:0[V]
		5-6	No Hazard.	AVR1:0[V]
		7-8	No Hazard.	AVR1:0[V]
		8-9	Output voltage decreased.No Hazard.	AVR1:decreased
		9-10	Output voltage decreased.No Hazard.	AVR1:decreased
		11-12	Output voltage decreased.No Hazard.	AVR1:decreased
		12-13	Output voltage decreased.No Hazard.	AVR1:decreased
IC502	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
		11	Output voltage decreased.No Hazard.	AVR1:decreased
		12	Output voltage decreased.No Hazard.	AVR1:decreased
		13	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
		3-4	Output voltage decreased.No Hazard.	AVR1:decreased
		4-5	No Hazard.	AVR1:0[V]



F M E A

Component	Mode		Comment	Output Voltage (V)
IC502	Short	5-6	No Hazard.	AVR1:0[V]
		7-8	No Hazard.	AVR1:0[V]
		8-9	Output voltage decreased.No Hazard.	AVR1:decreased
		9-10	Output voltage decreased.No Hazard.	AVR1:decreased
		11-12	Output voltage decreased.No Hazard.	AVR1:decreased
		12-13	Output voltage decreased.No Hazard.	AVR1:decreased
IC601	Open	1	No Hazard.	AVR1:0[V]
		2	No Hazard.	AVR1:0[V]
		3	No Hazard.	AVR1:0[V]
	Short	2-3	Normal operation.	AVR1:*
IC611	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
IC710	Open	1	Output voltage decreased.No Hazard.	AVR1:decreased
		2	Normal operation.	AVR1:*
		3	Output voltage decreased.No Hazard.	AVR1:decreased
		4	Output voltage decreased.No Hazard.	AVR1:decreased
		5	Normal operation.	AVR1:*
		6	Normal operation.	AVR1:*



F M E A

Component	Mode		Comment	Output Voltage (V)	
IC710	Open	7	Normal operation.	AVR1:*	
		8	Output voltage decreased.No Hazard.	AVR1:decreased	
		9	Output voltage decreased.No Hazard.	AVR1:decreased	
		10	Normal operation.	AVR1:*	
		11	Normal operation.	AVR1:*	
		12	Normal operation.	AVR1:*	
		13	Normal operation.	AVR1:*	
		14	Output voltage decreased.No Hazard.	AVR1:decreased	
		15	Output voltage decreased.No Hazard.	AVR1:decreased	
		16	Normal operation.	AVR1:*	
		17	No Hazard.	AVR1:0[V]	
		18	Normal operation.	AVR1:*	
		19	Normal operation.	AVR1:*	
		20	Normal operation.	AVR1:*	
		21	Normal operation.	AVR1:*	
		22	Normal operation.	AVR1:*	
		23	Output voltage decreased.No Hazard.	AVR1:decreased	
		24	Normal operation.	AVR1:*	
		25	Normal operation.	AVR1:*	
		26	Normal operation.	AVR1:*	
		27	Output voltage decreased.No Hazard.	AVR1:decreased	
		28	Output voltage decreased.No Hazard.	AVR1:decreased	
		Short	1-2	Normal operation.	AVR1:*
			2-3	Output voltage decreased.No Hazard.	AVR1:decreased





F M E A

Component	Mode		Comment	Output Voltage (V)
IC710	Short	3-4	Normal operation.	AVR1:*
		4-5	Output voltage decreased.No Hazard.	AVR1:decreased
		5-6	Normal operation.	AVR1:*
		6-7	Output voltage decreased.No Hazard.	AVR1:decreased
		8-9	Output voltage decreased.No Hazard.	AVR1:decreased
		9-10	Normal operation.	AVR1:*
		10-11	Normal operation.	AVR1:*
		11-12	Normal operation.	AVR1:*
		12-13	Normal operation.	AVR1:*
		13-14	Normal operation.	AVR1:*
		15-16	Output voltage decreased.No Hazard.	AVR1:decreased
		16-17	No Hazard.	AVR1:0[V]
		17-18	Normal operation.	AVR1:*
		18-19	Normal operation.	AVR1:*
		19-20	Normal operation.	AVR1:*
		20-21	No Hazard.	AVR1:0[V]
		22-23	Normal operation.	AVR1:*
		23-24	Normal operation.	AVR1:*
		24-25	Normal operation.	AVR1:*
		25-26	Normal operation.	AVR1:*
26-27	Normal operation.	AVR1:*		
27-28	Normal operation.	AVR1:*		
IC721	Open	1	Normal operation.	AVR1:*
		2	Normal operation.	AVR1:*



F M E A

Component	Mode		Comment	Output Voltage (V)
IC721	Open	3	Output voltage decreased. No Hazard.	AVR1:decreased
		4	Normal operation.	AVR1:*
		5	Normal operation.	AVR1:*
	Short	1-2	Normal operation.	AVR1:*
		2-3	Output voltage decreased. No Hazard.	AVR1:decreased
		4-5	Output voltage decreased. No Hazard.	AVR1:decreased
IC741	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
		3-4	Output voltage decreased. No Hazard.	AVR1:decreased
		4-5	Output voltage decreased. No Hazard.	AVR1:decreased
		IC742	Open	1
2	Normal operation.	AVR1:*		
3	Normal operation.	AVR1:*		
4	Normal operation.	AVR1:*		
5	Normal operation.	AVR1:*		
Short	1-2	Output voltage decreased. No Hazard.	AVR1:decreased	
	2-3	Normal operation.	AVR1:*	
	3-4	Normal operation.	AVR1:*	
	4-5	Output voltage decreased. No Hazard.	AVR1:decreased	



F M E A

Component	Mode	Comment	Output Voltage (V)	
IC802	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	Output voltage decreased.No Hazard.	AVR1:decreased
		4-5	Normal operation.	AVR1:*
PTH421	Open	Normal operation.	AVR1:*	
R101	Open	Normal operation.	AVR1:*	
R102	Open	Normal operation.	AVR1:*	
R103	Open	Normal operation.	AVR1:*	
R104	Open	Normal operation.	AVR1:*	
R111	Open	Output voltage decreased.No Hazard.	AVR1:decreased	
R112	Open	Output voltage decreased.No Hazard.	AVR1:decreased	
R113	Open	Output voltage decreased.No Hazard.	AVR1:decreased	
R114	Open	Output voltage decreased.No Hazard.	AVR1:decreased	
R120	Open	No Hazard.	AVR1:0[V]	
R201	Open	Output voltage decreased.No Hazard.	AVR1:decreased	
R202	Open	Output voltage decreased.No Hazard.	AVR1:decreased	
R203	Open	No Hazard.	AVR1:0[V]	
R310	Open	Normal operation.	AVR1:*	
R311	Open	Normal operation.	AVR1:*	
R312	Open	Normal operation.	AVR1:*	

F M E A

Component	Mode	Comment	Output Voltage (V)
R313	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R316	Open	Normal operation.	AVR1:*
R318	Open	Normal operation.	AVR1:*
R319	Open	Normal operation.	AVR1:*
R411	Open	No Hazard.	AVR1:0[V]
R412	Open	Normal operation.	AVR1:*
R414	Open	No Hazard.	AVR1:0[V]
R415	Open	Normal operation.	AVR1:*
R421	Open	Normal operation.	AVR1:*
R430	Open	No Hazard.	AVR1:0[V]
R431	Open	No Hazard.	AVR1:0[V]
R432	Open	No Hazard.	AVR1:0[V]
R433	Open	Normal operation.	AVR1:*
R434	Open	No Hazard.	AVR1:0[V]
R435	Open	No Hazard.	AVR1:0[V]
R436	Open	No Hazard.	AVR1:0[V]
R437	Open	No Hazard.	AVR1:0[V]
R438	Open	No Hazard.	AVR1:0[V]
R439	Open	No Hazard.	AVR1:0[V]
R440	Open	No Hazard.	AVR1:0[V]
R441	Open	No Hazard.	AVR1:0[V]
R442	Open	Normal operation.	AVR1:*
R443	Open	No Hazard.	AVR1:0[V]
R444	Open	Normal operation.	AVR1:*



F M E A

Component	Mode	Comment	Output Voltage (V)
R445	Open	No Hazard.	AVR1:0[V]
R451	Open	No Hazard.	AVR1:0[V]
R501	Open	Normal operation.	AVR1:*
R502	Open	Normal operation.	AVR1:*
R503	Open	Normal operation.	AVR1:*
R504	Open	Normal operation.	AVR1:*
R511	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R512	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R513	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R514	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R519	Open	Normal operation.	AVR1:*
R529	Open	Normal operation.	AVR1:*
R542	Open	Normal operation.	AVR1:*
R543	Open	Normal operation.	AVR1:*
R552	Open	Normal operation.	AVR1:*
R553	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R556	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R557	Open	Normal operation.	AVR1:*
R601	Open	No Hazard.	AVR1:0[V]
R602	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R610	Open	No Hazard.	AVR1:0[V]
R611	Open	No Hazard.	AVR1:0[V]
R612	Open	No Hazard.	AVR1:0[V]
R613	Open	Normal operation.	AVR1:*



F M E A

Component	Mode	Comment	Output Voltage (V)
R614	Open	Normal operation.	AVR1:*
R615	Open	No Hazard.	AVR1:0[V]
R616	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R617	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R618	Open	Normal operation.	AVR1:*
R619	Open	Normal operation.	AVR1:*
R620	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R621	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R711	Open	No Hazard.	AVR1:0[V]
R720	Open	Normal operation.	AVR1:*
R721	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R722	Open	Normal operation.	AVR1:*
R723	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R724	Open	Normal operation.	AVR1:*
R725	Open	Normal operation.	AVR1:*
R726	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R727	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R728	Open	Normal operation.	AVR1:*
R729	Open	Normal operation.	AVR1:*
R730	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R731	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R732	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R733	Open	Output voltage decreased.No Hazard.	AVR1:decreased
R741	Open	Output voltage decreased.No Hazard.	AVR1:decreased



F M E A

Component	Mode		Comment	Output Voltage (V)
R742	Open		Normal operation.	AVR1:*
R743	Open		Normal operation.	AVR1:*
R744	Open		Output voltage decreased.No Hazard.	AVR1:decreased
R745	Open		Output voltage decreased.No Hazard.	AVR1:decreased
R746	Open		Normal operation.	AVR1:*
R801	Open		Output voltage decreased.No Hazard.	AVR1:decreased
R802	Open		Output voltage decreased.No Hazard.	AVR1:decreased
R803	Open		Output voltage decreased.No Hazard.	AVR1:decreased
R804	Open		Normal operation.	AVR1:*
R805	Open		Output voltage decreased.No Hazard.	AVR1:decreased
R806	Open		Output voltage decreased.No Hazard.	AVR1:decreased
R807	Open		Output voltage decreased.No Hazard.	AVR1:decreased
R808	Open		Normal operation.	AVR1:*
R816	Open		Output voltage decreased.No Hazard.	AVR1:decreased
R818	Open		Output voltage decreased.No Hazard.	AVR1:decreased
R819	Open		Normal operation.	AVR1:*
R820	Open		Normal operation.	AVR1:*
R824	Open		Normal operation.	AVR1:*
R825	Open		Output voltage decreased.No Hazard.	AVR1:decreased
R826	Open		Output voltage decreased.No Hazard.	AVR1:decreased
TH711	Open		Normal operation.	AVR1:*
	Short		No Hazard.	AVR1:0[V]
TR101	Open	D	See 32 Page.	
		S	See 32 Page.	



F M E A

Component	Mode		Comment	Output Voltage (V)
TR101	Open	G	See 32 Page.	
	Short	D-S	See 32 Page.	
		S-G	See 32 Page.	
		G-D	See 32 Page.	
TR102	Open	D	See 32 Page.	
		S	See 32 Page.	
		G	See 32 Page.	
	Short	D-S	See 32 Page.	
		S-G	See 32 Page.	
		G-D	See 32 Page.	
TR103	Open	D	See 32 Page.	
		S	See 32 Page.	
		G	See 32 Page.	
	Short	D-S	See 32 Page.	
		S-G	See 32 Page.	
		G-D	See 33 Page.	
TR104	Open	D	See 33 Page.	
		S	See 33 Page.	
		G	See 33 Page.	
	Short	D-S	See 33 Page.	
		S-G	See 33 Page.	
		G-D	See 33 Page.	
TR311 (1)	Open	C	Output voltage decreased. No Hazard.	AVR1: decreased
		E	Output voltage decreased. No Hazard.	AVR1: decreased





F M E A

Component	Mode		Comment	Output Voltage (V)
TR311 (1)	Open	B	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	C-E	Normal operation.	AVR1:*
		E-B	Output voltage decreased.No Hazard.	AVR1:decreased
		B-C	Output voltage decreased.No Hazard.	AVR1:decreased
TR311 (2)	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	Output voltage decreased.No Hazard.	AVR1:decreased
		E-B	Normal operation.	AVR1:*
		B-C	Output voltage decreased.No Hazard.	AVR1:decreased
TR411	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:*
TR412	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
TR421	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*



F M E A

Component	Mode		Comment	Output Voltage (V)
TR421	Open	B	Normal operation.	AVR1:*
	Short	C-E	No Hazard.	AVR1:0[V]
		E-B	Normal operation.	AVR1:*
		B-C	No Hazard.	AVR1:0[V]
TR440	Open	C	No Hazard.	AVR1:0[V]
		E	No Hazard.	AVR1:0[V]
		B	No Hazard.	AVR1:0[V]
	Short	C-E	Normal operation.	AVR1:*
		E-B	No Hazard.	AVR1:0[V]
		B-C	Normal operation.	AVR1:*
TR451 (1)	Open	C	No Hazard.	AVR1:0[V]
		E	No Hazard.	AVR1:0[V]
		B	No Hazard.	AVR1:0[V]
	Short	C-E	No Hazard.	AVR1:0[V]
		E-B	No Hazard.	AVR1:0[V]
		B-C	No Hazard.	AVR1:0[V]
TR451 (2)	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	Output voltage decreased.No Hazard.	AVR1:decreased
		E-B	Normal operation.	AVR1:*
		B-C	Output voltage decreased.No Hazard.	AVR1:decreased
TR501	Open	D	See 33 Page.	
		S	See 33 Page.	

F M E A

Component	Mode		Comment	Output Voltage (V)
TR501	Open	G	Output voltage decreased.No Hazard.	AVR1:decreased
		Short	D-S	See 33 Page.
	S-G		Output voltage decreased.No Hazard.	AVR1:decreased
	G-D	See 33 Page.		
TR502	Open	D	See 33 Page.	
		S	See 33 Page.	
		G	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	D-S	See 33 Page.	
		S-G	Output voltage decreased.No Hazard.	AVR1:decreased
		G-D	See 33 Page.	
TR503	Open	D	See 33 Page.	
		S	See 33 Page.	
		G	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	D-S	See 33 Page.	
		S-G	Output voltage decreased.No Hazard.	AVR1:decreased
		G-D	See 33 Page.	
TR504	Open	D	See 33 Page.	
		S	See 33 Page.	
		G	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	D-S	See 33 Page.	
		S-G	Output voltage decreased.No Hazard.	AVR1:decreased
		G-D	See 33 Page.	
TR541	Open	D	Normal operation.	AVR1:*
		S	Normal operation.	AVR1:*



F M E A

Component	Mode		Comment	Output Voltage (V)
TR541	Open	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
TR551	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
	Short	C-E	Output voltage decreased.No Hazard.	AVR1:decreased
		E-B	Output voltage decreased.No Hazard.	AVR1:decreased
		B-C	Output voltage decreased.No Hazard.	AVR1:decreased
TR552	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	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
TR553	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	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
TR554	Open	C	Output voltage decreased.No Hazard.	AVR1:decreased
		E	Output voltage decreased.No Hazard.	AVR1:decreased



F M E A

Component	Mode		Comment	Output Voltage (V)
TR554	Open	B	Output voltage decreased.No Hazard.	AVR1:decreased
	Short	C-E	Output voltage decreased.No Hazard.	AVR1:decreased
		E-B	Output voltage decreased.No Hazard.	AVR1:decreased
		B-C	Output voltage decreased.No Hazard.	AVR1:decreased
TR611 (1)	Open	C	No Hazard.	AVR1:0[V]
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	Normal operation.	AVR1:*
		E-B	Normal operation.	AVR1:*
		B-C	Normal operation.	AVR1:*
TR611 (2)	Open	C	No Hazard.	AVR1:0[V]
		E	No Hazard.	AVR1:0[V]
		B	No Hazard.	AVR1:0[V]
	Short	C-E	Normal operation.	AVR1:*
		E-B	Normal operation.	AVR1:*
		B-C	No Hazard.	AVR1:0[V]
TR612	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
	Short	C-E	Output voltage decreased.No Hazard.	AVR1:decreased
		E-B	Output voltage decreased.No Hazard.	AVR1:decreased
		B-C	Output voltage decreased.No Hazard.	AVR1:decreased
TR621	Open	D	Output voltage decreased.No Hazard.	AVR1:decreased
		S	Output voltage decreased.No Hazard.	AVR1:decreased



F M E A

Component	Mode		Comment	Output Voltage (V)
TR621	Open	G	Output voltage decreased.No Hazard.	AVR1:decreased
	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
TR720	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	No Hazard.	AVR1:0[V]
		E-B	No Hazard.	AVR1:0[V]
		B-C	No Hazard.	AVR1:0[V]
TR802	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	Normal operation.	AVR1:*
ZD411	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
ZD440	Open		Normal operation.	AVR1:*
	Short		No Hazard.	AVR1:0[V]
ZD451	Open		No Hazard.	AVR1:0[V]
	Short		No Hazard.	AVR1:0[V]
ZD541	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*



F M E A

Component	Mode	Comment	Output Voltage (V)
ZD720	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0[V]



ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
C101	Short		External Fuse opened, No hazard.	AVR1:0
C103	Short		External Fuse opened, No hazard.	AVR1:0
C105	Short		External Fuse opened, No hazard.	AVR1:0
C109	Short		External Fuse opened, No hazard.	AVR1:0
C112	Short		External Fuse opened, No hazard.	AVR1:0
C113	Short		External Fuse opened, No hazard.	AVR1:0
C114	Short		External Fuse opened, No hazard.	AVR1:0
TR101	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	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
TR102	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	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
TR103	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	Output voltage decreased. No Hazard.	AVR1:decreased
		S-G	Output voltage decreased. No Hazard.	AVR1:decreased





ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
TR103	Short	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	Output voltage decreased. No Hazard.	AVR1:decreased
	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
TR501	Open	D	Output voltage decreased. No Hazard.	
		S	Output voltage decreased. No Hazard.	
	Short	D-S	Output voltage decreased. No Hazard.	
		G-D	Output voltage decreased. No Hazard.	
TR502	Open	D	Output voltage decreased. No Hazard.	
		S	Output voltage decreased. No Hazard.	
	Short	D-S	Output voltage decreased. No Hazard.	
		G-D	Output voltage decreased. No Hazard.	
TR503	Open	D	Output voltage decreased. No Hazard.	
		S	Output voltage decreased. No Hazard.	
	Short	D-S	Output voltage decreased. No Hazard.	
		G-D	Output voltage decreased. No Hazard.	
TR504	Open	D	Output voltage decreased. No Hazard.	
		S	Output voltage decreased. No Hazard.	
	Short	D-S	Output voltage decreased. No Hazard.	
		G-D	Output voltage decreased. No Hazard.	