

## ABNORMAL TEST RESULT

OF MODEL KHEA120F-24

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 : 2/36 ~ 34/36)

( Abnormal Test Result: 35/36 ~ 36/36)

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)
C101	Open	Normal operation.	AVR1:*
	Short	F101 opened, No hazard.	AVR1:0
C102	Open	Normal operation.	AVR1:*
	Short	F101 opened, No hazard.	AVR1:0
C103	Open	Normal operation.	AVR1:*
	Short	F101 opened, No hazard.	AVR1:0
C108	Open	Normal operation.	AVR1:*
	Short	F101 opened, No hazard.	AVR1:0
C109	Open	F101 opened, No hazard.	AVR1:0
	Short	Normal operation.	AVR1:*
C112	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C113	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C150	Open	Normal operation.	AVR1:*
	Short	R305 opened, No Hazard.	AVR1:0
C151	Open	No Hazard.	AVR1:0
	Short	No Hazard.	AVR1:0
C152	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C154	Open	Normal operation.	AVR1:*
	Short	R305 opened, No Hazard.	AVR1:0
C155	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0

## F M E A

Component	Mode	Comment	Output Voltage (V)
C201	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C203	Open	Output voltage decreased.	AVR1:decreased
	Short	Normal operation.	AVR1:*
C204	Open	Output voltage decreased.	AVR1:decreased
	Short	Normal operation.	AVR1:*
C207	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.	AVR1:decreased
C208	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C209	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C210	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C211	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C212	Open	Normal operation.	AVR1:*
	Short	R305 opened, No Hazard.	AVR1:0
C213	Open	Normal operation.	AVR1:*
	Short	R305 opened, No Hazard.	AVR1:0
C214	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C215	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0

## F M E A

Component	Mode	Comment	Output Voltage (V)
C230	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C301	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C304	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C305	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C306	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C307	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C308	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C320	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C321	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C323	Open	R305 opened, No Hazard.	AVR1:0
	Short	R305 opened, No Hazard.	AVR1:0
C324	Open	No Hazard.	AVR1:0
	Short	No Hazard.	AVR1:0
C325	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0

## F M E A

Component	Mode	Comment	Output Voltage (V)
C326	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C401	Open	Normal operation.	AVR1:**
	Short	R401 opened, No Hazard.	AVR1:**
C402	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C410	Open	Normal operation.	AVR1:**
	Short	R305 opened, No Hazard.	AVR1:0
C411	Open	Normal operation.	AVR1:**
	Short	R305 opened, No hazard.	AVR1:0
C413	Open	No Hazard.	AVR1:0
	Short	No Hazard.	AVR1:0
C414	Open	Normal operation.	AVR1:**
	Short	No Hazard.	AVR1:0
C415	Open	Normal operation.	AVR1:**
	Short	No Hazard.	AVR1:0
C419	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**
C430	Open	Normal operation.	AVR1:**
	Short	R305 opened, No Hazard.	AVR1:0
C440	Open	Normal operation.	AVR1:**
	Short	R305 opened, No Hazard.	AVR1:0
C450	Open	No Hazard.	AVR1:0
	Short	F101 opened, No hazard.	AVR1:0

F M E A

Component	Mode	Comment	Output Voltage (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	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C455	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C456	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C457	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C501	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.	AVR1:decreased
C502	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.	AVR1:decreased
C504	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.	AVR1:decreased
C505	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.	AVR1:decreased
C506	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.	AVR1:decreased

## F M E A

Component	Mode	Comment	Output Voltage (V)
C530	Open	Normal operation.	AVR1:**
	Short	R305 opened, No Hazard.	AVR1:0
C533	Open	Normal operation.	AVR1:**
	Short	R305 opened, No Hazard.	AVR1:0
C541	Open	Normal operation.	AVR1:**
	Short	Output voltage decreased.	AVR1:decreased
C542	Open	Normal operation.	AVR1:**
	Short	Output voltage decreased.	AVR1:decreased
C544	Open	Normal operation.	AVR1:**
	Short	R305 opened, No Hazard.	AVR1:0
C545	Open	Normal operation.	AVR1:**
	Short	R305 opened, No Hazard.	AVR1:0
C546	Open	Normal operation.	AVR1:**
	Short	R305 opened, No Hazard.	AVR1:0
C547	Open	Normal operation.	AVR1:**
	Short	R305 opened, No Hazard.	AVR1:0
C552	Open	Output voltage decreased.	AVR1:decreased
	Short	Output voltage decreased.	AVR1:decreased
C556	Open	Output voltage decreased.	AVR1:decreased
	Short	Output voltage decreased.	AVR1:decreased
C558	Open	Normal operation.	AVR1:**
	Short	Output voltage decreased.	AVR1:decreased
C601	Open	Normal operation.	AVR1:**
	Short	Normal operation.	AVR1:**

## F M E A

Component	Mode	Comment	Output Voltage (V)
C602	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C603	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C604	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C621	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C622	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C623	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C624	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D101	Open	F101 opened, No hazard.	AVR1:0
	Short	F101 opened, No hazard.	AVR1:0
D103	Open	Output voltage decreased.	AVR1:decreased
	Short	Normal operation.	AVR1:*
D104	Open	Output voltage decreased.	AVR1:decreased
	Short	Normal operation.	AVR1:*
D105	Open	Output voltage decreased.	AVR1:decreased
	Short	Normal operation.	AVR1:*
D106	Open	Output voltage decreased.	AVR1:decreased
	Short	Normal operation.	AVR1:*

## F M E A

Component	Mode	Comment	Output Voltage (V)
D152	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D205	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.	AVR1:decreased
D301	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D320	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D321	Open	No Hazard.	AVR1:0
	Short	R305 opened, No Hazard.	AVR1:0
D322	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D401	Open	Normal operation.	AVR1:*
	Short	R401 opened, No Hazard.	AVR1:*
D402	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D430	Open	Normal operation.	AVR1:*
	Short	R305 opened, No hazard.	AVR1:0
D431	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
D441	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
D451	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*

## F M E A

Component	Mode		Comment	Output Voltage (V)
D452	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
D453	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
D454	Open		Output voltage decreased.	AVR1:decreased
	Short		Output voltage decreased.	AVR1:decreased
D455	Open		Normal operation.	AVR1:*
	Short		Output voltage decreased.	AVR1:decreased
D456	Open		Normal operation.	AVR1:*
	Short		R305 opened, No hazard.	AVR1:0
D457	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
D530	Open		Output voltage decreased.	AVR1:decreased
	Short		R305 opened, No Hazard.	AVR1:0
D551	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
D552	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
IC101	Open	1	Normal operation.	AVR1:*
		2	Normal operation.	AVR1:*
		3	Output voltage decreased.	AVR1:decreased
		4	Normal operation.	AVR1:*
		5	Normal operation.	AVR1:*
		6	Normal operation.	AVR1:*

## F M E A

Component	Mode		Comment	Output Voltage (V)
IC101	Open	7	Normal operation.	AVR1:*
		8	Normal operation.	AVR1:*
		9	Normal operation.	AVR1:*
		10	Normal operation.	AVR1:*
		11	Normal operation.	AVR1:*
		12	No Hazard.	AVR1:0
		13	No Hazard.	AVR1:0
		14	Normal operation.	AVR1:*
		15	Normal operation.	AVR1:*
		16	Normal operation.	AVR1:*
		17	No Hazard.	AVR1:0
		18	Normal operation.	AVR1:*
		19	No Hazard.	AVR1:0
		20	Normal operation.	AVR1:*
		21	Normal operation.	AVR1:*
		22	Normal operation.	AVR1:*
		23	Normal operation.	AVR1:*
		24	Normal operation.	AVR1:*
		25	No Hazard.	AVR1:0
		26	No Hazard.	AVR1:0
		27	Normal operation.	AVR1:*
		28	Normal operation.	AVR1:*
		29	Normal operation.	AVR1:*
		30	No Hazard.	AVR1:0

## F M E A

Component	Mode		Comment	Output Voltage (V)
IC101	Short	1-2	No Hazard.	AVR1:0
		2-3	No Hazard.	AVR1:0
		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	Normal operation.	AVR1:*
		9-10	Normal operation.	AVR1:*
		10-11	Normal operation.	AVR1:*
		11-12	R305 opened, No Hazard.	AVR1:0
		12-13	Normal operation.	AVR1:*
		13-14	Normal operation.	AVR1:*
		14-15	No Hazard.	AVR1:0
		16-17	F101 opened, No hazard.	AVR1:0
		17-18	Normal operation.	AVR1:*
		18-19	Normal operation.	AVR1:*
		19-20	No Hazard.	AVR1:0
		20-21	No Hazard.	AVR1:0
		21-22	Normal operation.	AVR1:*
		22-23	Normal operation.	AVR1:*
		23-24	No Hazard.	AVR1:0
		24-25	No Hazard.	AVR1:0
		25-26	Normal operation.	AVR1:*

## F M E A

Component	Mode		Comment	Output Voltage (V)
IC101	Short	26-27	Output voltage decreased.	AVR1:decreased
		27-28	R305 opened, No Hazard.	AVR1:0
		28-29	Normal operation.	AVR1:*
		29-30	Normal operation.	AVR1:*
IC152	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
	Short	1-2	Normal operation.	AVR1:*
		2-3	No Hazard.	AVR1:0
		4-5	No Hazard.	AVR1:0
IC301	Open	1	Normal operation.	AVR1:*
		2	Normal operation.	AVR1:*
		3	R305 opened, No Hazard.	AVR1:0
		4	R305 opened, No Hazard.	AVR1:0
		5	R305 opened, No Hazard.	AVR1:0
	Short	1-2	Normal operation.	AVR1:*
		2-3	No Hazard.	AVR1:0
		4-5	R305 opened, No Hazard.	AVR1:0
IC302	Open	1	Normal operation.	AVR1:*
		2	Normal operation.	AVR1:*
		3	Normal operation.	AVR1:*
		4	Normal operation.	AVR1:*

## F M E A

Component	Mode		Comment	Output Voltage (V)
IC302	Open	5	Normal operation.	AVR1:*
		1-2	Normal operation.	AVR1:*
	Short	2-3	No Hazard.	AVR1:0
		4-5	No Hazard.	AVR1:0
IC401	Open	1	Normal operation.	AVR1:*
		2	Normal operation.	AVR1:*
		3	No Hazard.	AVR1:0
		4	No Hazard.	AVR1:0
		5	Normal operation.	AVR1:*
		6	Normal operation.	AVR1:*
		7	No Hazard.	AVR1:0
		8	Normal operation.	AVR1:*
		9	Normal operation.	AVR1:*
		10	Normal operation.	AVR1:*
		11	No Hazard.	AVR1:0
		12	No Hazard.	AVR1:0
		13	Normal operation.	AVR1:*
		14	No Hazard.	AVR1:0
		15	No Hazard.	AVR1:0
		16	Normal operation.	AVR1:*
	Short	1-2	R305 opened, No hazard.	AVR1:0
		2-3	No Hazard.	AVR1:0
		3-4	No Hazard.	AVR1:0
		4-5	Normal operation.	AVR1:*

## F M E A

Component	Mode		Comment	Output Voltage (V)
IC401	Short	5-6	No Hazard.	AVR1:0
		6-7	No Hazard.	AVR1:0
		7-8	No Hazard.	AVR1:0
		9-10	Normal operation.	AVR1:*
		10-11	No Hazard.	AVR1:0
		11-12	F101 opened, No hazard.	AVR1:0
		12-13	Normal operation.	AVR1:*
		13-14	Normal operation.	AVR1:*
		14-15	No Hazard.	AVR1:0
		15-16	F101 opened, No hazard.	AVR1:0
IC501	Open	1	Normal operation.	AVR1:*
		2	Output voltage decreased.	AVR1:decreased
		3	Output voltage decreased.	AVR1:decreased
		4	Output voltage decreased.	AVR1:decreased
		5	Output voltage decreased.	AVR1:decreased
		6	Output voltage decreased.	AVR1:decreased
		7	Output voltage decreased.	AVR1:decreased
		8	Output voltage decreased.	AVR1:decreased
	Short	1-2	Normal operation.	AVR1:*
		2-3	Output voltage decreased.	AVR1:decreased
		3-4	Normal operation.	AVR1:*
		5-6	Output voltage decreased.	AVR1:decreased
		6-7	Output voltage decreased.	AVR1:decreased
		7-8	Output voltage decreased.	AVR1:decreased

## F M E A

Component	Mode		Comment	Output Voltage (V)
IC502	Open	1	Normal operation.	AVR1:*
		2	Output voltage decreased.	AVR1:decreased
		3	Output voltage decreased.	AVR1:decreased
		4	Output voltage decreased.	AVR1:decreased
		5	Output voltage decreased.	AVR1:decreased
		6	Output voltage decreased.	AVR1:decreased
		7	Output voltage decreased.	AVR1:decreased
		8	Output voltage decreased.	AVR1:decreased
	Short	1-2	Normal operation.	AVR1:*
		2-3	Output voltage decreased.	AVR1:decreased
		3-4	Normal operation.	AVR1:*
		5-6	Output voltage decreased.	AVR1:decreased
		6-7	Output voltage decreased.	AVR1:decreased
		7-8	Output voltage decreased.	AVR1:decreased
IC503	Open	1	Normal operation.	AVR1:*
		2	Normal operation.	AVR1:*
		3	Output voltage decreased.	AVR1:decreased
		4	Output voltage decreased.	AVR1:decreased
		5	Output voltage decreased.	AVR1:decreased
	Short	1-2	Normal operation.	AVR1:*
		2-3	Output voltage decreased.	AVR1:decreased
		4-5	Output voltage decreased.	AVR1:decreased
IC601	Open	1	Normal operation.	AVR1:*
		2	Normal operation.	AVR1:*

## F M E A

Component	Mode		Comment	Output Voltage (V)
IC601	Open	3	Normal operation.	AVR1:*
		4	Normal operation.	AVR1:*
		5	Normal operation.	AVR1:*
	Short	1-2	Normal operation.	AVR1:*
		2-3	Output voltage decreased.	AVR1:decreased
		4-5	Normal operation.	AVR1:*
L101	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
L102	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
L105	Open		No Hazard.	AVR1:0
	Short		F101 opened, No hazard.	AVR1:0
L501	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
LED601	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
LED602	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
PC401	Open	A, K	Output voltage decreased.	AVR1:decreased
		C, E	Output voltage decreased.	AVR1:decreased
	Short	A-K	Output voltage decreased.	AVR1:decreased
		C-E	Output voltage decreased.	AVR1:decreased
PC402	Open	A, K	Normal operation.	AVR1:*
		C, E	Normal operation.	AVR1:*

## F M E A

Component	Mode		Comment	Output Voltage (V)
PC402	Short	A-K	Normal operation.	AVR1:*
		C-E	No Hazard.	AVR1:0
PC601	Open	A, K	Normal operation.	AVR1:*
		C, E	Normal operation.	AVR1:*
	Short	A-K	Normal operation.	AVR1:*
		C-E	Normal operation.	AVR1:*
PC602	Open	A, K	Normal operation.	AVR1:*
		C, E	Normal operation.	AVR1:*
	Short	A-K	Normal operation.	AVR1:*
		C-E	Normal operation.	AVR1:*
PC701	Open	A, K	Normal operation.	AVR1:*
		C, E	Normal operation.	AVR1:*
	Short	A-K	Normal operation.	AVR1:*
		C-E	Normal operation.	AVR1:*
PTH201	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
PTH601	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
SS101	Open		Output voltage decreased.	AVR1:decreased
	Short		F101 opened, No hazard.	AVR1:0
T301	Open	2	Output voltage decreased.	AVR1:decreased
		3	Output voltage decreased.	AVR1:decreased
		5	Normal operation.	AVR1:*
		7	Normal operation.	AVR1:*

## F M E A

Component	Mode		Comment	Output Voltage (V)
T301	Open	8	Normal operation.	AVR1:*
		9	Normal operation.	AVR1:*
	Short	2-3	R305 opened, No Hazard.	AVR1:0
		5-7	F101 opened, No hazard.	AVR1:0
		8-9	R305 opened, No Hazard.	AVR1:0
T401	Open	2	Normal operation.	AVR1:*
		3	Normal operation.	AVR1:*
		4	No Hazard.	AVR1:0
		6	No Hazard.	AVR1:0
		7	Output voltage decreased.	AVR1:decreased
		9	Output voltage decreased.	AVR1:decreased
		11	Output voltage decreased.	AVR1:decreased
		12	Output voltage decreased.	AVR1:decreased
	Short	2-3	F101 opened, No hazard.	AVR1:0
		4-6	F101 opened, No hazard.	AVR1:0
		7-9	F101 opened, No hazard.	AVR1:0
TH101	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
TR101	Open	D	No Hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	F101 opened, No hazard.	AVR1:0
	Short	D-S	F101 opened, No hazard.	AVR1:0
		S-G	No Hazard.	AVR1:0
		G-D	F101 opened, No hazard.	AVR1:0

## F M E A

Component	Mode		Comment	Output Voltage (V)
TR151	Open	D(3)	No Hazard.	AVR1:0
		S(4)	No Hazard.	AVR1:0
		G(5)	No Hazard.	AVR1:0
	Short	D-S(3-4)	No Hazard.	AVR1:0
		S-G(4-5)	No Hazard.	AVR1:0
		G-D(5-3)	No Hazard.	AVR1:0
	Open	D(6)	F101 opened, No hazard.	AVR1:0
		S(1)	F101 opened, No hazard.	AVR1:0
		G(2)	F101 opened, No hazard.	AVR1:0
	Short	D-S(6-1)	No Hazard.	AVR1:0
		S-G(1-2)	F101 opened, No hazard.	AVR1:0
		G-D(2-6)	No Hazard.	AVR1:0
TR201	Open	C	Output voltage decreased.	AVR1:decreased
		E	Output voltage decreased.	AVR1:decreased
		B	Output voltage decreased.	AVR1:decreased
	Short	C-E	Output voltage decreased.	AVR1:decreased
		E-B	Output voltage decreased.	AVR1:decreased
		B-C	Output voltage decreased.	AVR1:decreased
TR301	Open	D	Normal operation.	AVR1:*
		S	Normal operation.	AVR1:*
		G	Normal operation.	AVR1:*
	Short	D-S	R305 opened, No Hazard.	AVR1:0
		S-G	Normal operation.	AVR1:*
		G-D	R305 opened, No Hazard.	AVR1:0

## F M E A

Component	Mode		Comment	Output Voltage (V)
TR302	Open	C	No hazard.	AVR1:0
		E	No hazard.	AVR1:0
		B	No hazard.	AVR1:0
	Short	C-E	R305 opened, No Hazard.	AVR1:0
		E-B	R305 opened, No Hazard.	AVR1:0
		B-C	R305 opened, No Hazard.	AVR1:0
TR303	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
TR304	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
TR320	Open	D	No Hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	No Hazard.	AVR1:0
	Short	D-S	F101 opened, No hazard.	AVR1:0
		S-G	No Hazard.	AVR1:0
		G-D	F101 opened, No hazard.	AVR1:0

## F M E A

Component	Mode		Comment	Output Voltage (V)
TR321	Open	D(3)	No Hazard.	AVR1:0
		S(4)	No Hazard.	AVR1:0
		G(5)	No Hazard.	AVR1:0
	Short	D-S(3-4)	R305 opened, No Hazard.	AVR1:0
		S-G(4-5)	No Hazard.	AVR1:0
		G-D(5-3)	R305 opened, No Hazard.	AVR1:0
	Open	D(6)	F101 opened, No hazard.	AVR1:0
		S(1)	F101 opened, No hazard.	AVR1:0
		G(2)	F101 opened, No hazard.	AVR1:0
	Short	D-S(6-1)	No Hazard.	AVR1:0
		S-G(1-2)	F101 opened, No hazard.	AVR1:0
		G-D(2-6)	No Hazard.	AVR1:0
TR401	Open	D	No hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	F101 opened, No hazard.	AVR1:0
	Short	D-S	F101 opened, No hazard.	AVR1:0
		S-G	No Hazard.	AVR1:0
		G-D	F101 opened, No hazard.	AVR1:0
TR402	Open	D	No hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	F101 opened, No hazard.	AVR1:0
	Short	D-S	F101 opened, No hazard.	AVR1:0
		S-G	No Hazard.	AVR1:0
		G-D	F101 opened, No hazard.	AVR1:0

## F M E A

Component	Mode		Comment	Output Voltage (V)
TR403	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
TR430	Open	C(5)	F101 opened, No hazard.	AVR1:0
		E(2)	No Hazard.	AVR1:0
		B(1)	F101 opened, No hazard.	AVR1:0
		C(4)	No Hazard.	AVR1:0
		B(3)	No Hazard.	AVR1:0
	Short	B(1)-E(2)	F101 opened, No hazard.	AVR1:0
		E(2)-B(3)	F101 opened, No hazard.	AVR1:0
		C(4)-C(5)	R305 opened, No Hazard.	AVR1:0
TR440	Open	C(5)	F101 opened, No hazard.	AVR1:0
		E(2)	No Hazard.	AVR1:0
		B(1)	F101 opened, No hazard.	AVR1:0
		C(4)	No Hazard.	AVR1:0
		B(3)	No Hazard.	AVR1:0
	Short	B(1)-E(2)	F101 opened, No hazard.	AVR1:0
		E(2)-B(3)	F101 opened, No hazard.	AVR1:0
		C(4)-C(5)	R305 opened, No Hazard.	AVR1:0
TR441	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*

## F M E A

Component	Mode		Comment	Output Voltage (V)
TR441	Open	B	Normal operation.	AVR1:*
	Short	C-E	No Hazard.	AVR1:0
		E-B	Normal operation.	AVR1:*
		B-C	No Hazard.	AVR1:0
TR501	Open	D	Output voltage decreased.	AVR1:decreased
		S	Output voltage decreased.	AVR1:decreased
		G	Output voltage decreased.	AVR1:decreased
	Short	D-S	Output voltage decreased.	AVR1:decreased
		S-G	Output voltage decreased.	AVR1:decreased
		G-D	Output voltage decreased.	AVR1:decreased
TR502	Open	D	Output voltage decreased.	AVR1:decreased
		S	Output voltage decreased.	AVR1:decreased
		G	Output voltage decreased.	AVR1:decreased
	Short	D-S	Output voltage decreased.	AVR1:decreased
		S-G	Output voltage decreased.	AVR1:decreased
		G-D	Output voltage decreased.	AVR1:decreased
TR530	Open	C	Output voltage decreased.	AVR1:decreased
		E	Output voltage decreased.	AVR1:decreased
		B	Output voltage decreased.	AVR1:decreased
	Short	C-E	Normal operation.	AVR1:*
		E-B	Output voltage decreased.	AVR1:decreased
		B-C	Normal operation.	AVR1:*
TR601	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*

## F M E A

Component	Mode		Comment	Output Voltage (V)
TR601	Open	B	Normal operation.	AVR1:*
	Short	C-E	Output voltage decreased.	AVR1:decreased
		E-B	Normal operation.	AVR1:*
		B-C	Output voltage decreased.	AVR1:decreased
TR602	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	Output voltage decreased.	AVR1:decreased
		E-B	Normal operation.	AVR1:*
		B-C	Output voltage decreased.	AVR1:decreased
TR603	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	Normal operation.	AVR1:*
		E-B	Normal operation.	AVR1:*
		B-C	Normal operation.	AVR1:*
TR604	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	Normal operation.	AVR1:*
		E-B	Normal operation.	AVR1:*
		B-C	Normal operation.	AVR1:*
TR605	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*

## F M E A

Component	Mode		Comment	Output Voltage (V)
TR605	Open	B	Normal operation.	AVR1:*
	Short	C-E	Normal operation.	AVR1:*
		E-B	Normal operation.	AVR1:*
		B-C	Normal operation.	AVR1:*
VR551	Open	brush	Output voltage decreased.	AVR1:decreased
			Output voltage decreased.	AVR1:decreased
	Short		Output voltage decreased.	AVR1:decreased
ZD151	Open		Normal operation.	AVR1:*
	Short		No Hazard.	AVR1:0
ZD201	Open		Normal operation.	AVR1:*
	Short		R305 opened, No Hazard.	AVR1:0
ZD302	Open		R305 opened, No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
ZD303	Open		R305 opened, No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
ZD320	Open		Normal operation.	AVR1:*
	Short		No Hazard.	AVR1:0
ZD401	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
ZD402	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
ZD411	Open		Normal operation.	AVR1:*
	Short		No Hazard.	AVR1:0
ZD440	Open		Normal operation.	AVR1:*

## F M E A

Component	Mode	Comment	Output Voltage (V)
ZD440	Short	R305 opened, No Hazard.	AVR1:0
ZD451	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
ZD452	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
ZD453	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
ZD454	Open	Output voltage decreased.	AVR1:decreased
	Short	Output voltage decreased.	AVR1:decreased
ZD530	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.	AVR1:decreased
ZD601	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
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:*
R150	Open	Normal operation.	AVR1:*
R151	Open	Normal operation.	AVR1:*
R152	Open	Normal operation.	AVR1:*
R153	Open	Normal operation.	AVR1:*
R154	Open	Normal operation.	AVR1:*
R155	Open	Normal operation.	AVR1:*

## F M E A

Component	Mode	Comment	Output Voltage (V)
R156	Open	Normal operation.	AVR1:*
R157	Open	Output voltage decreased.	AVR1:decreased
R158	Open	Normal operation.	AVR1:*
R159	Open	Output voltage decreased.	AVR1:decreased
R163	Open	No Hazard.	AVR1:0
R164	Open	Normal operation.	AVR1:*
R165	Open	No Hazard.	AVR1:0
R201	Open	No Hazard.	AVR1:0
R202	Open	No Hazard.	AVR1:0
R203	Open	No Hazard.	AVR1:0
R204	Open	No Hazard.	AVR1:0
R205	Open	Normal operation.	AVR1:*
R206	Open	Normal operation.	AVR1:*
R211	Open	Output voltage decreased.	AVR1:decreased
R212	Open	Output voltage decreased.	AVR1:decreased
R213	Open	Output voltage decreased.	AVR1:decreased
R214	Open	Output voltage decreased.	AVR1:decreased
R215	Open	Normal operation.	AVR1:*
R220	Open	No Hazard.	AVR1:0
R221	Open	Output voltage decreased.	AVR1:decreased
R222	Open	No Hazard.	AVR1:0
R223	Open	Normal operation.	AVR1:*
R224	Open	Normal operation.	AVR1:*
R225	Open	Normal operation.	AVR1:*

## F M E A

Component	Mode	Comment	Output Voltage (V)
R226	Open	Normal operation.	AVR1:*
R227	Open	Normal operation.	AVR1:*
R228	Open	Normal operation.	AVR1:*
R230	Open	No Hazard.	AVR1:0
R231	Open	No Hazard.	AVR1:0
R232	Open	No Hazard.	AVR1:0
R233	Open	No Hazard.	AVR1:0
R234	Open	No Hazard.	AVR1:0
R235	Open	Output voltage decreased.	AVR1:decreased
R238	Open	Normal operation.	AVR1:*
R301	Open	Normal operation.	AVR1:*
R302	Open	Normal operation.	AVR1:*
R303	Open	Normal operation.	AVR1:*
R304	Open	Normal operation.	AVR1:*
R305	Open	Normal operation.	AVR1:*
R306	Open	Normal operation.	AVR1:*
R307	Open	No Hazard.	AVR1:0
R308	Open	No Hazard.	AVR1:0
R309	Open	Normal operation.	AVR1:*
R310	Open	No Hazard.	AVR1:0
R312	Open	No Hazard.	AVR1:0
R314	Open	Normal operation.	AVR1:*
R315	Open	Normal operation.	AVR1:*
R317	Open	Normal operation.	AVR1:*

## F M E A

Component	Mode	Comment	Output Voltage (V)
R318	Open	Normal operation.	AVR1:*
R321	Open	Normal operation.	AVR1:*
R324	Open	Normal operation.	AVR1:*
R325	Open	R305 opened, No Hazard.	AVR1:0
R326	Open	F101 opened, No hazard.	AVR1:0
R327	Open	Normal operation.	AVR1:*
R328	Open	Normal operation.	AVR1:*
R329	Open	No Hazard.	AVR1:0
R330	Open	No Hazard.	AVR1:0
R331	Open	R305 opened, No Hazard.	AVR1:0
R332	Open	No Hazard.	AVR1:0
R333	Open	Normal operation.	AVR1:*
R334	Open	Normal operation.	AVR1:*
R401	Open	Normal operation.	AVR1:*
R402	Open	Normal operation.	AVR1:*
R403	Open	Normal operation.	AVR1:*
R411	Open	Normal operation.	AVR1:*
R412	Open	Normal operation.	AVR1:*
R413	Open	Normal operation.	AVR1:*
R414	Open	Output voltage decreased.	AVR1:decreased
R415	Open	Output voltage decreased.	AVR1:decreased
R416	Open	No Hazard.	AVR1:0
R417	Open	Output voltage decreased.	AVR1:decreased
R418	Open	No Hazard.	AVR1:0

## F M E A

Component	Mode	Comment	Output Voltage (V)
R419	Open	No Hazard.	AVR1:0
R420	Open	Normal operation.	AVR1:*
R421	Open	Normal operation.	AVR1:*
R422	Open	Normal operation.	AVR1:*
R430	Open	No Hazard.	AVR1:0
R432	Open	Normal operation.	AVR1:*
R433	Open	No Hazard.	AVR1:0
R434	Open	No Hazard.	AVR1:0
R435	Open	No Hazard.	AVR1:0
R437	Open	Normal operation.	AVR1:*
R440	Open	No Hazard.	AVR1:0
R442	Open	Normal operation.	AVR1:*
R443	Open	No Hazard.	AVR1:0
R444	Open	No Hazard.	AVR1:0
R445	Open	Normal operation.	AVR1:*
R446	Open	Normal operation.	AVR1:*
R450	Open	Normal operation.	AVR1:*
R451	Open	Normal operation.	AVR1:*
R452	Open	Normal operation.	AVR1:*
R453	Open	Normal operation.	AVR1:*
R454	Open	Normal operation.	AVR1:*
R455	Open	Normal operation.	AVR1:*
R456	Open	Normal operation.	AVR1:*
R457	Open	Normal operation.	AVR1:*

## F M E A

Component	Mode	Comment	Output Voltage (V)
R458	Open	Normal operation.	AVR1:*
R459	Open	Normal operation.	AVR1:*
R460	Open	Normal operation.	AVR1:*
R461	Open	Normal operation.	AVR1:*
R462	Open	Output voltage decreased.	AVR1:decreased
R463	Open	Normal operation.	AVR1:*
R464	Open	Normal operation.	AVR1:*
R501	Open	Output voltage decreased.	AVR1:decreased
R502	Open	Output voltage decreased.	AVR1:decreased
R503	Open	Output voltage decreased.	AVR1:decreased
R504	Open	Normal operation.	AVR1:*
R505	Open	Output voltage decreased.	AVR1:decreased
R506	Open	Output voltage decreased.	AVR1:decreased
R507	Open	Output voltage decreased.	AVR1:decreased
R508	Open	Output voltage decreased.	AVR1:decreased
R509	Open	Output voltage decreased.	AVR1:decreased
R510	Open	Normal operation.	AVR1:*
R511	Open	Output voltage decreased.	AVR1:decreased
R512	Open	Output voltage decreased.	AVR1:decreased
R540	Open	Output voltage decreased.	AVR1:decreased
R541	Open	Output voltage decreased.	AVR1:decreased
R542	Open	Normal operation.	AVR1:*
R543	Open	Normal operation.	AVR1:*
R551	Open	Output voltage decreased.	AVR1:decreased

## F M E A

Component	Mode	Comment	Output Voltage (V)
R553	Open	Output voltage decreased.	AVR1:decreased
R554	Open	Normal operation.	AVR1:*
R555	Open	Output voltage decreased.	AVR1:decreased
R556	Open	Output voltage decreased.	AVR1:decreased
R557	Open	Output voltage decreased.	AVR1:decreased
R558	Open	Output voltage decreased.	AVR1:decreased
R559	Open	Output voltage decreased.	AVR1:decreased
R560	Open	Output voltage decreased.	AVR1:decreased
R561	Open	Normal operation.	AVR1:*
R562	Open	Normal operation.	AVR1:*
R601	Open	Normal operation.	AVR1:*
R602	Open	Normal operation.	AVR1:*
R603	Open	Normal operation.	AVR1:*
R604	Open	Normal operation.	AVR1:*
R605	Open	Output voltage decreased.	AVR1:decreased
R606	Open	Normal operation.	AVR1:*
R607	Open	Normal operation.	AVR1:*
R608	Open	Output voltage decreased.	AVR1:decreased
R609	Open	Output voltage decreased.	AVR1:decreased
R610	Open	Normal operation.	AVR1:*
R611	Open	Normal operation.	AVR1:*
R621	Open	Normal operation.	AVR1:*
R622	Open	Normal operation.	AVR1:*
R623	Open	Normal operation.	AVR1:*

F M E A

Component	Mode	Comment	Output Voltage (V)
R624	Open	Normal operation.	AVR1:*
R626	Open	Normal operation.	AVR1:*
R627	Open	Normal operation.	AVR1:*
R628	Open	Normal operation.	AVR1:*
R629	Open	Normal operation.	AVR1:*
R630	Open	Normal operation.	AVR1:*
R632	Open	Normal operation.	AVR1:*
R633	Open	Normal operation.	AVR1:*
R701	Open	Normal operation.	AVR1:*
R702	Open	Normal operation.	AVR1:*

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
C103	Open		Normal operation.	AVR1:*
C323	Open		R305 opened, No Hazard.	AVR1:0
C401	Short		R401 opened, No Hazard.	AVR1:*
C411	Short		R305 opened, No hazard.	AVR1:0
C450	Short		F101 opened, No hazard.	AVR1:0
C542	Short		Output voltage decreased.	AVR1:decreased
D321	Short		R305 opened, No Hazard.	AVR1:0
D430	Short		R305 opened, No hazard.	AVR1:0
D454	Open		Output voltage decreased.	AVR1:decreased
	Short		Output voltage decreased.	AVR1:decreased
D455	Short		Output voltage decreased.	AVR1:decreased
D456	Short		R305 opened, No hazard.	AVR1:0
D530	Short		R305 opened, No Hazard.	AVR1:0
IC101	Short	26-27	Output voltage decreased.	AVR1:decreased
IC401	Short	1-2	R305 opened, No hazard.	AVR1:0
IC501	Open	2	Output voltage decreased.	AVR1:decreased
		3	Output voltage decreased.	AVR1:decreased
IC502	Open	2	Output voltage decreased.	AVR1:decreased
		3	Output voltage decreased.	AVR1:decreased
T401	Open	7	Output voltage decreased.	AVR1:decreased
TR101	Open	D	No Hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	F101 opened, No hazard.	AVR1:0
	Short	D-S	F101 opened, No hazard.	AVR1:0

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
TR101	Short	S-G	No Hazard.	AVR1:0
		G-D	F101 opened, No hazard.	AVR1:0
TR401	Open	D	No hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	F101 opened, No hazard.	AVR1:0
	Short	D-S	F101 opened, No hazard.	AVR1:0
		S-G	No Hazard.	AVR1:0
		G-D	F101 opened, No hazard.	AVR1:0
TR402	Open	D	No hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	F101 opened, No hazard.	AVR1:0
	Short	D-S	F101 opened, No hazard.	AVR1:0
		S-G	No Hazard.	AVR1:0
		G-D	F101 opened, No hazard.	AVR1:0
TR502	Open	G	Output voltage decreased.	AVR1:decreased