

## ABNORMAL TEST RESULT

OF MODEL KL□A120F-24/-48

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 : 2/18 ~ 16/18)

( Abnormal Test Result: 17/18 ~ 18/18)

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	
	Short	F101 opened, No hazard.	AVR1:0
C102	Open	Normal operation	
	Short	F101 opened, No hazard.	AVR1:0
C103	Open	See 17 Page.	
	Short	F101 opened, No hazard.	AVR1:0
C106	Open	Normal operation	
	Short	No hazard.	AVR1:0
C109	Open	Normal operation	
	Short	Normal operation	
C110	Open	Normal operation	
	Short	Normal operation	
C112	Open	Normal operation	
	Short	Normal operation	
C113	Open	Normal operation	
	Short	No hazard.	AVR1:0
C114	Open	Normal operation	
	Short	Normal operation	
C115	Open	Normal operation	
	Short	Normal operation	
C116	Open	Normal operation	
	Short	Normal operation	
C120	Open	See 17 Page.	
	Short	No hazard.	AVR1:0

F M E A

Component	Mode	Comment	Output Voltage (V)
C121	Open	See 17 Page.	
	Short	No hazard.	AVR1:0
C201	Open	Normal operation	
	Short	No hazard.	AVR1:0
C202	Open	Normal operation	
	Short	No hazard.	AVR1:0
C204	Open	Normal operation	
	Short	No hazard.	AVR1:0
C205	Open	Normal operation	
	Short	No hazard.	AVR1:0
C206	Open	Normal operation	
	Short	Normal operation	
C207	Open	Normal operation	
	Short	Normal operation	
C209	Open	Normal operation	
	Short	No hazard.	AVR1:0
C220	Open	Normal operation	
	Short	Normal operation	
C221	Open	Normal operation	
	Short	Normal operation	
C226	Open	Normal operation	
	Short	Normal operation	
C501	Open	Normal operation	
	Short	Normal operation	

F M E A

Component	Mode		Comment	Output Voltage (V)
C502	Open		Normal operation	
	Short		Normal operation	
C503	Open		Normal operation	
	Short		Normal operation	
C504	Open		Normal operation	
	Short		Normal operation	
C505	Open		Normal operation	
	Short		Normal operation	
C506	Open		Normal operation	
	Short		Normal operation	
C507	Open		Normal operation	
	Short		Normal operation	
C508	Open		Normal operation	
	Short		Normal operation	
C513	Open	Only 48	Normal operation	
	Short	Only 48	Normal operation	
C514	Open	Only 48	Normal operation	
	Short	Only 48	Normal operation	
C515	Open		Output voltage decreased.	AVR1:decreased
	Short		Output voltage decreased.	AVR1:decreased
C516	Open		Output voltage decreased.	AVR1:decreased
	Short		Output voltage decreased.	AVR1:decreased
C518	Open		Normal operation	
	Short		Normal operation	

F M E A

Component	Mode		Comment	Output Voltage (V)
C519	Open		Normal operation	
	Short		Normal operation	
C520	Open		Normal operation	
	Short		Normal operation	
C521	Open		Normal operation	
	Short		Normal operation	
C522	Open		Output voltage decreased.	AVR1:decreased
	Short		Output voltage decreased.	AVR1:decreased
C523	Open	Only 48	Output voltage decreased.	AVR1:decreased
	Short	Only 48	Output voltage decreased.	AVR1:decreased
C602	Open		Output voltage decreased.	AVR1:decreased
	Short		Normal operation	
C606	Open	Only 24	Output voltage decreased.	AVR1:decreased
	Short	Only 24	Output voltage decreased.	AVR1:decreased
D101	Open		No hazard.	AVR1:0
	Short		F101 opened, No hazard	AVR1:0
D102	Open		Normal operation	
	Short		No hazard.	AVR1:0
D103	Open		See 17 Page.	
	Short		Normal operation	
D104	Open		Normal operation	
	Short		No hazard.	AVR1:0
D105	Open		Normal operation	
	Short		Normal operation	

F M E A

Component	Mode	Comment	Output Voltage (V)	
D106	Open	Normal operation		
	Short	Normal operation		
D107	Open	Normal operation		
	Short	Normal operation		
D201	Open	Output voltage decreased.	AVR1:decreased	
	Short	See 17 Page.		
D202	Open	See 17 Page.		
	Short	Normal operation		
D203	Open	Normal operation		
	Short	Normal operation		
D204	Open	Normal operation		
	Short	No hazard.	AVR1:0	
D205	Open	Normal operation		
	Short	Normal operation		
D206	Open	See 17 Page.		
	Short	Normal operation		
D210	Open	Normal operation		
	Short	See 17 Page.		
IC201	Open	1	Output voltage decreased.	AVR1:decreased
		2	No hazard.	AVR1:0
		3	Output voltage decreased.	AVR1:decreased
		4	No hazard.	AVR1:0
		5	Normal operation	
		6	See 17 Page.	

F M E A

Component	Mode		Comment	Output Voltage (V)
IC201	Open	7	No hazard.	AVR1:0
		8	See 17 Page.	
		9	No hazard.	AVR1:0
		10	See 17 Page.	
		11	Normal operation	
		12	Output voltage decreased.	AVR1:decreased
		13	No hazard.	AVR1:0
		14	No hazard.	AVR1:0
		16	Normal operation	
	Short	1-2	See 17 Page.	
		2-3	No hazard.	AVR1:0
		3-4	See 17 Page.	
		4-5	No hazard.	AVR1:0
		5-6	See 17 Page.	
		6-7	See 17 Page.	
		7-8	See 17 Page.	
		9-10	No hazard.	AVR1:0
		10-11	Normal operation	
		11-12	No hazard.	AVR1:0
		12-13	See 17 Page.	
13-14	No hazard.	AVR1:0		
14-15	Normal operation			
15-16	Normal operation			
IC601	Open	1	Normal operation	

F M E A

Component	Mode		Comment	Output Voltage (V)
IC601	Open	2	Normal operation	
		3	No hazard.	AVR1:0
		4	No hazard.	AVR1:0
		5	No hazard.	AVR1:0
	Short	2-3	Output voltage decreased.	AVR1:decreased
		4-5	No hazard.	AVR1:0
J501	Open	Only 24	Normal operation	
J502	Open	Only 24	Normal operation	
J601	Open	Only 24	No hazard.	AVR1:0
J602	Open		No hazard.	AVR1:0
L101	Open		No hazard.	AVR1:0
	Short		Normal operation	
L102	Open		No hazard.	AVR1:0
	Short		Normal operation	
L103	Open	11	See 17 Page.	
		12	See 17 Page.	
		9	No hazard.	AVR1:0
		1	No hazard.	AVR1:0
	Short	11-12	No hazard.	AVR1:0
L501	Open		See 17 Page.	
	Short		Normal operation	
LED501	Open		Normal operation	
	Short		Normal operation	
PC201	Open	A, K	No hazard.	AVR1:0



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Component	Mode		Comment	Output Voltage (V)
PC201	Open	C, E	No hazard.	AVR1:0
	Short	A-K	No hazard.	AVR1:0
		C-E	Output voltage decreased.	AVR1:decreased
PC202	Open	A, K	Normal operation	
		C, E	Normal operation	
	Short	A-K	Normal operation	
		C-E	No hazard.	AVR1:0
PTH201	Open		No hazard.	AVR1:0
	Short		Normal operation	
SK101	Open		Normal operation	
	Short		F101 opened, No hazard.	AVR1:0
SS101	Open		No hazard.	AVR1:0
	Short		F101 opened, No hazard.	AVR1:0
SS501	Open	Cathod	No hazard.	AVR1:0
		Alternative	See 17 Page.	
	Short	C-A	No hazard.	AVR1:0
T201	Open	1	No hazard.	AVR1:0
		2	No hazard.	AVR1:0
		3	Normal operation	
		4	See 17 Page.	
		5	See 17 Page.	
		7, 8, 9	No hazard.	AVR1:0
		10, 11	No hazard.	AVR1:0
	Short	1-2	F101 opened, No hazard	AVR1:0

F M E A

Component	Mode		Comment	Output Voltage (V)
T201	Short	2-3	No hazard.	AVR1:0
		3-4	See 17 Page.	
		4-5	F101 opened, No hazard	AVR1:0
		7, 8, 9-10, 11	See 17 Page.	
TH101	Open		Normal operation	
	Short		Normal operation	
TR101	Open	D	No hazard.	AVR1:0
		S	No hazard.	AVR1:0
		G	See 18 Page.	
	Short	D-S	See 18 Page.	
		S-G	No hazard.	AVR1:0
		G-D	See 18 Page.	
TR201	Open	D	See 18 Page.	
		S	See 18 Page.	
		G	See 18 Page.	
	Short	D-S	See 18 Page.	
		S-G	See 18 Page.	
		G-D	See 18 Page.	
TR202	Open	S(1)	Normal operation	
		G(2)	Normal operation	
		D(3)	Normal operation	
		S(4)	Normal operation	
		G(5)	Normal operation	
		D(6)	Normal operation	

F M E A

Component	Mode		Comment	Output Voltage (V)
TR202	Short	1-2	Normal operation	
		2-3	Normal operation	
		4-5	Normal operation	
		5-6	Normal operation	
TR203	Open	C	See 18 Page.	
		E	See 18 Page.	
		B	See 18 Page.	
	Short	C-E	Normal operation	
		E-B	Normal operation	
		B-C	Normal operation	
TR206	Open	C	Normal operation	
		E	Normal operation	
		B	Normal operation	
	Short	C-E	No hazard.	AVR1:0
		E-B	Normal operation	
		B-C	No hazard.	AVR1:0
VR601	Open	brush	Output voltage decreased.	AVR1:decreased
			Output voltage decreased.	AVR1:decreased
	Short		No hazard.	AVR1:0
ZD101	Open		Normal operation	
	Short		Normal operation	
ZD102	Open		Normal operation	
	Short		Normal operation	
ZD202	Open		Normal operation	

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Component	Mode		Comment	Output Voltage (V)
ZD202	Short		See 18 Page.	
ZD501	Open	Only 48	Normal operation	
	Short	Only 48	No hazard.	AVR1:0
ZD502	Open		Normal operation	
	Short		No hazard.	AVR1:0
ZD503	Open		Normal operation	
	Short		Normal operation	
ZD504	Open	Only 48	Normal operation	
	Short	Only 48	Normal operation	
ZD601	Open	Only 48	No hazard.	AVR1:0
	Short	Only 48	No hazard.	AVR1:0
R101	Open		Normal operation	
R102	Open		Normal operation	
R103	Open		Normal operation	
R104	Open		Normal operation	
R105	Open		Normal operation	
R106	Open		No hazard.	AVR1:0
R107	Open		No hazard.	AVR1:0
R108	Open		No hazard.	AVR1:0
R109	Open		No hazard.	AVR1:0
R110	Open		Normal operation	
R111	Open		Normal operation	
R112	Open		Normal operation	
R115	Open		See 18 Page.	

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Component	Mode	Comment	Output Voltage (V)
R119	Open	No hazard.	AVR1:0
R120	Open	Normal operation	
R121	Open	Normal operation	
R123	Open	Normal operation	
R124	Open	Normal operation	
R125	Open	Normal operation	
R126	Open	Output voltage decreased.	AVR1:decreased
R127	Open	Output voltage decreased.	AVR1:decreased
R128	Open	Output voltage decreased.	AVR1:decreased
R130	Open	Normal operation	
R131	Open	No hazard.	AVR1:0
R132	Open	No hazard.	AVR1:0
R133	Open	No hazard.	AVR1:0
R134	Open	No hazard.	AVR1:0
R135	Open	No hazard.	AVR1:0
R136	Open	No hazard.	AVR1:0
R137	Open	No hazard.	AVR1:0
R138	Open	Normal operation	
R139	Open	Normal operation	
R140	Open	Normal operation	
R150	Open	Normal operation	
R151	Open	No hazard.	AVR1:0
R152	Open	Normal operation	
R153	Open	Normal operation	

F M E A

Component	Mode	Comment	Output Voltage (V)
R154	Open	Normal operation	
R155	Open	Normal operation	
R201	Open	Normal operation	
R202	Open	Normal operation	
R203	Open	See 18 Page.	
R204	Open	See 18 Page.	
R205	Open	No hazard.	AVR1:0
R206	Open	Normal operation	
R208	Open	Normal operation	
R209	Open	No hazard.	AVR1:0
R210	Open	Normal operation	
R211	Open	Normal operation	
R212	Open	No hazard.	AVR1:0
R213	Open	No hazard.	AVR1:0
R215	Open	No hazard.	AVR1:0
R216	Open	Normal operation	
R217	Open	Output voltage decreased.	AVR1:decreased
R218	Open	Output voltage decreased.	AVR1:decreased
R219	Open	Normal operation	
R230	Open	Normal operation	
R231	Open	Normal operation	
R232	Open	Normal operation	
R233	Open	Normal operation	
R234	Open	Normal operation	

F M E A

Component	Mode		Comment	Output Voltage (V)
R235	Open		Normal operation	
R236	Open		Normal operation	
R237	Open		Normal operation	
R238	Open		Normal operation	
R239	Open		Normal operation	
R240	Open		Normal operation	
R241	Open		Normal operation	
R246	Open		Normal operation	
R247	Open		Normal operation	
R248	Open		Normal operation	
R501	Open		Normal operation	
R502	Open		Normal operation	
R503	Open		Normal operation	
R504	Open		Normal operation	
R510	Open	Only 48	Normal operation	
R520	Open		Normal operation	
R521	Open		Normal operation	
R522	Open		Normal operation	
R523	Open		Normal operation	
R601	Open		Output voltage decreased.	AVR1:decreased
R602	Open		Output voltage decreased.	AVR1:decreased
R604	Open		Normal operation	
R605	Open		Output voltage decreased.	AVR1:decreased
R606	Open		No hazard.	AVR1:0



F M E A

Component	Mode		Comment	Output Voltage (V)
R607	Open		No hazard.	AVR1:0
R608	Open		Output voltage decreased.	AVR1:decreased
R609	Open	Only 24	Output voltage decreased.	AVR1:decreased
R610	Open		Output voltage decreased.	AVR1:decreased



ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
C103	Open		Normal operation.	
C120	Open		Normal operation	
C121	Open		Normal operation	
D103	Open		Normal operation	
D201	Short		Normal operation	
D202	Open		Normal operation	
D206	Open		Normal operation	
D210	Short		Normal operation	
IC201	Open	6	Normal operation	
		8	Normal operation	
		10	No hazard.	AVR1:0
	Short	1-2	No hazard.	AVR1:0
		3-4	No hazard.	AVR1:0
		5-6	Normal operation	
		6-7	Normal operation	
		7-8	No hazard.	AVR1:0
	12-13	No hazard.	AVR1:0	
L103	Open	11	Normal operation	
		12	Normal operation	
L501	Open		No hazard.	AVR1:0
SS501	Open	Alternative	Normal operation	
T201	Open	4	No hazard.	AVR1:0
		5	No hazard.	AVR1:0
	Short	3-4	F101 opened, No hazard	AVR1:0



ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
T201	Short	8, 9-10, 11	F101 opened, No hazard	AVR1:0
TR101	Open	D	Normal operation	
		S	Normal operation	
		G	F101 opened, No hazard	AVR1:0
	Short	D-S	F101 opened, No hazard	AVR1:0
		S-G	Normal operation	
		G-D	F101 opened, No hazard	AVR1:0
TR201	Open	D	No hazard.	AVR1:0
		S	F101 opened, 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
TR203	Open	C	No hazard.	AVR1:0
		E	No hazard.	AVR1:0
		B	No hazard.	AVR1:0
ZD202	Short		No hazard.	AVR1:0
R115	Open		Normal operation	
R203	Open		No hazard.	AVR1:0
R204	Open		Output voltage decreased.	AVR1:decreased