

ABNORMAL TEST RESULT

OF MODEL LFA50F

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 : 2/17 ~ 14/17)

(Abnormal Test Result: 15/17 ~ 17/17)

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	Normal operation.	
	Short	F101 opened, No hazard.	AVR1:0
C106	Open	Normal operation.	
	Short	Normal operation.	
C107	Open	Normal operation.	
	Short	See 15 Page.	
C108	Open	Normal operation.	
	Short	See 15 Page.	
C109	Open	Normal operation.	
	Short	See 15 Page.	
C110	Open	See 15 Page.	
	Short	See 15 Page.	
C111	Open	Normal operation.	
	Short	See 15 Page.	
C112	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C113	Open	F101 opened, No hazard.	AVR1:0
	Short	F101 opened, No hazard.	AVR1:0
C114	Open	See 15 Page.	
	Short	See 15 Page.	

F M E A

Component	Mode	Comment	Output Voltage (V)
C201	Open	Normal operation.	
	Short	See 15 Page.	
C202	Open	Normal operation.	
	Short	See 15 Page.	
C203	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C204	Open	Normal operation.	
	Short	Normal operation.	
C205	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C206	Open	Normal operation.	
	Short	See 15 Page.	
C207	Open	Normal operation.	
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C208	Open	Normal operation.	
	Short	Normal operation.	
C501	Open	See 15 Page.	
	Short	See 15 Page.	
C502	Open	See 15 Page.	
	Short	See 15 Page.	
C503	Open	Normal operation.	
	Short	See 15 Page.	
C504	Open	Normal operation.	
	Short	See 15 Page.	

F M E A

Component	Mode		Comment	Output Voltage (V)
C505	Open		Normal operation.	
	Short		See 15 Page.	
C506	Open		Normal operation.	
	Short		See 15 Page.	
C507	Open		Output voltage decreased. No hazard.	AVR1:decreased
	Short		Output voltage decreased. No hazard.	AVR1:decreased
C601	Open		Output voltage decreased. No hazard.	AVR1:decreased
	Short		See 15 Page.	
C602	Open	only 36, 48	Normal operation.	
	Short	only 36, 48	No Hazard.	AVR1:0
D101	Open		Normal operation.	
	Short		Normal operation.	
D102	Open		Normal operation.	
	Short		Normal operation.	
D103	Open		Normal operation.	
	Short		Normal operation.	
D104	Open		Normal operation.	
	Short		Normal operation.	
D105	Open		Normal operation.	
	Short		Normal operation.	
D106	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
D107	Open		Normal operation.	
	Short		See 15 Page.	

F M E A

Component	Mode		Comment	Output Voltage (V)
D108	Open		No Hazard.	AVR1:0
	Short		See 15 Page.	
D109	Open		See 15 Page.	
	Short		See 15 Page.	
D111	Open		See 16 Page.	
	Short		Normal operation.	
D201	Open		Output voltage decreased. No hazard.	AVR1:decreased
	Short		See 16 Page.	
D202	Open		Output voltage decreased. No hazard.	AVR1:decreased
	Short		Normal operation.	
D203	Open		Normal operation.	
	Short		Normal operation.	
D204	Open		See 16 Page.	
	Short		Normal operation.	
D205	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
D206	Open		Normal operation.	
	Short		See 16 Page.	
IC101	Open	1	No Hazard.	AVR1:0
		2	Normal operation.	
		3	See 16 Page.	
		4	Normal operation.	
		5	See 16 Page.	
		6	No Hazard.	AVR1:0

F M E A

Component	Mode		Comment	Output Voltage (V)
IC101	Open	7	No Hazard.	AVR1:0
		8	No Hazard.	AVR1:0
	Short	1-2	See 16 Page.	
		2-3	See 16 Page.	
		3-4	Normal operation.	
		5-6	See 16 Page.	
		6-7	No Hazard.	AVR1:0
		7-8	F101 opened, No hazard.	AVR1:0
IC201	Open	1	Normal operation.	
		2	No Hazard.	AVR1:0
		3	Output voltage decreased. No hazard.	AVR1:decreased
		4	F101 opened, No hazard.	AVR1:0
		5	See 16 Page.	
		6	No Hazard.	AVR1:0
		7	Normal operation.	
		8	Normal operation.	
	Short	1-2	Normal operation.	
		2-3	Output voltage decreased. No hazard.	AVR1:decreased
		3-4	See 16 Page.	
		5-6	F101 opened, No hazard.	AVR1:0
		6-7	Normal operation.	
		7-8	Normal operation.	
IC601	Open	K	No Hazard.	AVR1:0
		A	No Hazard.	AVR1:0

F M E A

Component	Mode		Comment	Output Voltage (V)
IC601	Open	R	No Hazard.	AVR1:0
	Short	A-K	Output voltage decreased. No hazard.	AVR1:decreased
		K-R	Output voltage decreased. No hazard.	AVR1:decreased
		R-A	No Hazard.	AVR1:0
J101	Open		No Hazard.	AVR1:0
J201	Open		No Hazard.	AVR1:0
J202	Open		Output voltage decreased. No hazard.	AVR1:decreased
L101	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
L102	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
L103	Open	2, 4	No Hazard.	AVR1:0
		6, 7	Normal operation.	
	Short	2-4	See 16 Page.	
		6-7	See 16 Page.	
L201	Open		Output voltage decreased. No hazard.	AVR1:decreased
	Short		Normal operation.	
L501	Open		See 16 Page.	
	Short		Output voltage decreased. No hazard.	AVR1:decreased
PC201	Open	A, K	No Hazard.	AVR1:0
		C, E	No Hazard.	AVR1:0
	Short	A-K	No Hazard.	AVR1:0
		C-E	No Hazard.	AVR1:0
PC202	Open	A, K	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
PC202	Open	A, K	Normal operation.	
		C, E	Normal operation.	
	Short	A-K	Normal operation.	
		C-E	No Hazard.	AVR1:0
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	Cathode	F101 opened, No hazard.	AVR1:0
		Alternative	See 16 Page.	
	Short		See 16 Page.	
T101	Open	6, 10	No Hazard.	AVR1:0
		8, 9	Output voltage decreased. No hazard.	AVR1:decreased
		2, 3, 4, 5	See 16 Page.	
	Short	9-10	See 16 Page.	
		8-9	See 16 Page.	
		2, 3-4, 5	See 16 Page.	
TH101	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
TR101	Open	D	Normal operation.	
		S	Normal operation.	
		G	Normal operation.	
	Short	D-S	Normal operation.	
		S-G	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
TR101	Short	G-D	Normal operation.	
TR102	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	Normal operation.	
		E-B	Normal operation.	
		B-C	Normal operation.	
TR103	Open	D	Normal operation.	
		S	Normal operation.	
		G	Normal operation.	
	Short	D-S	Normal operation.	
		S-G	Normal operation.	
		G-D	Normal operation.	
TR104	Open	D	See 16 Page.	
		S	See 16 Page.	
		G	See 16 Page.	
	Short	D-S	See 16 Page.	
		S-G	See 17 Page.	
		G-D	See 17 Page.	
TR201	Open	D	See 17 Page.	
		S	See 17 Page.	
		G	See 17 Page.	
	Short	D-S	See 17 Page.	
		S-G	See 17 Page.	

F M E A

Component	Mode		Comment	Output Voltage (V)
TR202	Open	C	Normal operation.	
		E	Output voltage decreased. No hazard.	AVR1:decreased
		B	Output voltage decreased. No hazard.	AVR1:decreased
	Short	C-E	Normal operation.	
		E-B	Normal operation.	
		B-C	Normal operation.	
TR203	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	Output voltage decreased. No hazard.	AVR1:decreased
		E-B	Normal operation.	
		B-C	Output voltage decreased. No hazard.	AVR1:decreased
VR601	Open	brush only 3R3-Y	Output voltage decreased. No hazard.	AVR1:decreased
		only 3R3-Y	Output voltage decreased. No hazard.	AVR1:decreased
	Short	only 3R3-Y	Output voltage increased. No hazard.	AVR1:increased(120%)
ZD101	Open		Normal operation.	
	Short		Normal operation.	
ZD103	Open		Normal operation.	
	Short		Normal operation.	
ZD201	Open		Normal operation.	
	Short		Normal operation.	
ZD202	Open		Normal operation.	
	Short		Output voltage decreased. No hazard.	AVR1:decreased
ZD601	Open		Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
ZD601	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
ZD602	Open	only 36, 48	Normal operation.	
	Short	only 36, 48	No Hazard.	AVR1:0
ZD603	Open	only 36, 48	No Hazard.	AVR1:0
	Short	only 36, 48	Output voltage decreased. No hazard.	AVR1:decreased
R101	Open		Normal operation.	
R102	Open		Normal operation.	
R103	Open		Normal operation.	
R104	Open		Normal operation.	
R105	Open		Normal operation.	
R106	Open		Normal operation.	
R107	Open		Normal operation.	
R108	Open		Normal operation.	
R109	Open		Normal operation.	
R110	Open		Normal operation.	
R111	Open		Normal operation.	
R112	Open		Normal operation.	
R113	Open		Normal operation.	
R114	Open		Normal operation.	
R115	Open		Normal operation.	
R116	Open		Normal operation.	
R117	Open		Normal operation.	
R118	Open		See 17 Page.	

F M E A

Component	Mode	Comment	Output Voltage (V)
R120	Open	See 17 Page.	
R121	Open	See 17 Page.	
R122	Open	Normal operation.	
R123	Open	No Hazard.	AVR1:0
R124	Open	No Hazard.	AVR1:0
R125	Open	No Hazard.	AVR1:0
R126	Open	No Hazard.	AVR1:0
R127	Open	Normal operation.	
R128	Open	No Hazard.	AVR1:0
R129	Open	No Hazard.	AVR1:0
R130	Open	No Hazard.	AVR1:0
R131	Open	No Hazard.	AVR1:0
R132	Open	No Hazard.	AVR1:0
R133	Open	Normal operation.	
R134	Open	Normal operation.	
R135	Open	Normal operation.	
R136	Open	Normal operation.	
R137	Open	Normal operation.	
R138	Open	Normal operation.	
R139	Open	Normal operation.	
R140	Open	Normal operation.	
R141	Open	Normal operation.	
R142	Open	Normal operation.	
R201	Open	Output voltage decreased. No hazard.	AVR1:decreased

F M E A

Component	Mode	Comment	Output Voltage (V)
R202	Open	Output voltage decreased. No hazard.	AVR1:decreased
R203	Open	Output voltage decreased. No hazard.	AVR1:decreased
R204	Open	Normal operation.	
R205	Open	No Hazard.	AVR1:0
R206	Open	No Hazard.	AVR1:0
R207	Open	Normal operation.	
R208	Open	Normal operation.	
R209	Open	Normal operation.	
R210	Open	Normal operation.	
R211	Open	Normal operation.	
R212	Open	Normal operation.	
R213	Open	Normal operation.	
R214	Open	F101 opened, No hazard.	AVR1:0
R216	Open	No Hazard.	AVR1:0
R217	Open	Normal operation.	
R218	Open	Output voltage decreased. No hazard.	AVR1:decreased
R219	Open	Normal operation.	
R220	Open	Normal operation.	
R501	Open	Normal operation.	
R502	Open	Normal operation.	
R503	Open	Normal operation.	
R504	Open	Normal operation.	
R505	Open	Normal operation.	
R506	Open	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
R507	Open		Normal operation.	
R508	Open		Normal operation.	
R509	Open		Normal operation.	
R510	Open		Normal operation.	
R511	Open		Normal operation.	
R512	Open		Normal operation.	
R601	Open	except 36, 48	Normal operation.	
R602	Open		Normal operation.	
R603	Open		Normal operation.	
R604	Open	except 36, 48	No Hazard.	AVR1:0
R605	Open		No Hazard.	AVR1:0
R606	Open		No Hazard.	AVR1:0
R607	Open		Normal operation.	
R608	Open		Output voltage decreased. No hazard.	AVR1:decreased
R609	Open		No hazard.	AVR1:0
R610	Open		No Hazard.	AVR1:0
R611	Open		Output voltage decreased. No hazard.	AVR1:decreased
R612	Open	except 3R3-Y	Output voltage decreased. No hazard.	AVR1:decreased

ABNORMAL TEST RESULT

Component	Mode	Comment	Output Voltage (V)
C107	Short	Normal operation.	
C108	Short	No Hazard.	AVR1:0
C109	Short	No Hazard.	AVR1:0
C110	Open	Normal operation.	
	Short	Normal operation.	
C111	Short	Normal operation.	
C114	Open	Normal operation.	
	Short	F101 opened, No hazard.	AVR1:0
C201	Short	Output voltage decreased. No hazard.	AVR1:decreased
C202	Short	No Hazard.	AVR1:0
C206	Short	No Hazard.	AVR1:0
C501	Open	Normal operation.	
	Short	Normal operation.	
C502	Open	Normal operation.	
	Short	Normal operation.	
C503	Short	Normal operation.	
C504	Short	Normal operation.	
C505	Short	Normal operation.	
C506	Short	Normal operation.	
C601	Short	Output voltage decreased. No hazard.	AVR1:decreased
D107	Short	Normal operation.	
D108	Short	F101 opened, No hazard.	AVR1:0
D109	Open	Normal operation.	
	Short	F101 opened, No hazard.	AVR1:0

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
D111	Open		Normal operation.	
D201	Short		Output voltage decreased. No hazard.	AVR1:decreased
D204	Open		Normal operation.	
D206	Short		F101 opened, No hazard.	AVR1:0
IC101	Open	3	No Hazard.	AVR1:0
		5	Normal operation.	
	Short	1-2	Normal operation.	
		2-3	No Hazard.	AVR1:0
		5-6	Normal operation.	
	Short	3-4	No Hazard.	AVR1:0
IC201	Open	5	No Hazard.	AVR1:0
	Short	3-4	No Hazard.	AVR1:0
L103	Short	2-4	F101 opened, No hazard.	AVR1:0
		6-7	Normal operation.	
L501	Open		F101 opened, No hazard.	AVR1:0
SS501	Open	Alternative	Normal operation.	
	Short		Output voltage decreased. No hazard.	AVR1:decreased
T101	Open	2, 3, 4, 5	Normal operation.	
	Short	9-10	No Hazard.	AVR1:0
		8-9	Output voltage decreased. No hazard.	AVR1:decreased
		2, 3-4, 5	Output voltage decreased. No hazard.	AVR1:decreased
TR104	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)
TR104	Short	S-G	No Hazard.	AVR1:0
		G-D	F101 opened, No hazard.	AVR1:0
TR201	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
R118	Open		Normal operation.	
R120	Open		No Hazard.	AVR1:0
R121	Open		No Hazard.	AVR1:0