

## ABNORMAL TEST RESULT

OF MODEL LMA150F

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 ~ 17/18)

( Abnormal Test Result: 18/18 ~ 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.	AVR1:*
	Short	F101(F102) opened, No hazard.	AVR1:0
C102	Open	Normal operation.	AVR1:*
	Short	F101(F102) opened, No hazard.	AVR1:0
C103	Open	Normal operation.	AVR1:*
	Short	F101(F102) opened, No hazard.	AVR1:0
C110	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C111	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C113	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C114	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C115	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C116	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C117	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C118	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C119	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*

## F M E A

Component	Mode	Comment	Output Voltage (V)
C120	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C121	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C122	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C123	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C124	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C127	Open	F101(F102) opened, No hazard.	AVR1:0
	Short	F101(F102) opened, No hazard.	AVR1:0
C201	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C202	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C203	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C204	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C205	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C206	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0

F M E A

Component	Mode	Comment	Output Voltage (V)
C207	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C211	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C212	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C216	Open	Normal operation.	AVR1:*
	Short	See 17 Page.	
C217	Open	Normal operation.	AVR1:*
	Short	See 17 Page.	
C501	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C502	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C503	Open	Normal operation.	AVR1:*
	Short	See 17 Page.	
C504	Open	Normal operation.	AVR1:*
	Short	See 17 Page.	
C505	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C506	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C512	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0

F M E A

Component	Mode	Comment	Output Voltage (V)
C513	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C602	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C603	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	Output voltage decreased. No hazard.	AVR1:decreased
D101	Open	No Hazard.	AVR1:0
	Short	F101 (F102) opened, No hazard.	AVR1:0
D103	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D104	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D105	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D106	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D107	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D108	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
D109	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
D111	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*

## F M E A

Component	Mode		Comment	Output Voltage (V)
D112	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
D201	Open		Normal operation.	AVR1:*
	Short		No Hazard.	AVR1:0
D202	Open		Output voltage decreased. No hazard.	AVR1:decreased
	Short		Normal operation.	AVR1:*
D203	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
D204	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
D205	Open		Normal operation.	AVR1:*
	Short		No Hazard.	AVR1:0
D206	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
D211	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
IC101	Open	1	No Hazard.	AVR1:0
		2	Normal operation.	AVR1:*
		3	Normal operation.	AVR1:*
		4	No Hazard.	AVR1:*
		5	Normal operation.	AVR1:*
		6	No Hazard.	AVR1:*
		7	No Hazard.	AVR1:*
		8	No Hazard.	AVR1:*

## F M E A

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

## F M E A

Component	Mode		Comment	Output Voltage (V)
IC601	Short	K-R	Output voltage decreased. No hazard.	AVR1:decreased
		R-A	No Hazard.	AVR1:0
J601	Open		No Hazard.	AVR1:0
L101	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
L102	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
L104	Open	1	Normal operation.	AVR1:*
		5	No Hazard.	AVR1:0
		6	No Hazard.	AVR1:0
		9	Normal operation.	AVR1:*
L105	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
L507	Open		F101(F102) opened, No hazard.	AVR1:0
	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.	AVR1:*
		C, E	Normal operation.	AVR1:*
	Short	A-K	Normal operation.	AVR1:*
		C-E	No Hazard.	AVR1:0
PTH201	Open		No Hazard.	AVR1:0



## F M E A

Component	Mode		Comment	Output Voltage (V)
PTH201	Short		No Hazard.	AVR1:0
SK101	Open		Normal operation.	AVR1:*
	Short		F101(F102) opened, No hazard.	AVR1:0
SS101	Open		No Hazard.	AVR1:0
	Short		F101(F102) opened, No hazard.	AVR1:0
SS501	Open	Cathode	No Hazard.	AVR1:0
		Alternative	See 17 Page.	
SS502	Open	Cathode	No Hazard.	AVR1:0
		Alternative	See 17 Page.	
SS503	Open	Cathode	No Hazard.	AVR1:0
		Alternative	See 17 Page.	
T201	Open	1, 6	No Hazard.	AVR1:0
		3	Normal operation.	AVR1:*
		4, 5	Output voltage decreased. No hazard.	AVR1:decreased
		9	Normal operation.	AVR1:*
		10	Normal operation.	AVR1:*
		11	Normal operation.	AVR1:*
		12	Normal operation.	AVR1:*
	Short	1-3	F101(F102) opened, No hazard.	AVR1:0
		3-4	No Hazard.	AVR1:0
		4-5	Normal operation.	AVR1:*
		5-6	F101(F102) opened, No hazard.	AVR1:0
		9, 10-11, 12	No Hazard.	AVR1:0
TH101	Open		No Hazard.	AVR1:0

## F M E A

Component	Mode		Comment	Output Voltage (V)
TH101	Short		Normal operation.	AVR1:*
TR101	Open	D	See 17 Page.	
		S	See 17 Page.	
		G	See 17 Page.	
	Short	D-S	See 17 Page.	
		S-G	See 17 Page.	
		G-D	See 17 Page.	
TR103	Open	D	Normal operation.	AVR1:*
		S	Normal operation.	AVR1:*
		G	Normal operation.	AVR1:*
	Short	D-S	No Hazard.	AVR1:0
		S-G	Normal operation.	AVR1:*
		G-D	No Hazard.	AVR1:0
TR104	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:*
TR105	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	Normal operation.	AVR1:*
		E-B	Normal operation.	AVR1:*

## F M E A

Component	Mode		Comment	Output Voltage (V)
TR105	Short	B-C	Normal operation.	AVR1:*
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.	
		G-D	See 17 Page.	
TR204	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	No Hazard.	AVR1:0
		E-B	No Hazard.	AVR1:0
		B-C	No Hazard.	AVR1:0
VR601	Open	brush	Output voltage decreased. No hazard.	AVR1:decreased
			No Hazard.	AVR1:0
	Short		No Hazard.	AVR1:0
ZD101	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
ZD102	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
ZD104	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
ZD105	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*

F M E A

Component	Mode	Comment	Output Voltage (V)
ZD201	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
ZD202	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
ZD501	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
ZD502	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
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:*
R118	Open	Normal operation.	AVR1:*
R119	Open	Normal operation.	AVR1:*
R120	Open	Normal operation.	AVR1:*
R121	Open	Normal operation.	AVR1:*
R122	Open	Normal operation.	AVR1:*
R123	Open	Normal operation.	AVR1:*
R124	Open	Normal operation.	AVR1:*
R125	Open	Normal operation.	AVR1:*
R126	Open	Normal operation.	AVR1:*
R127	Open	Normal operation.	AVR1:*
R128	Open	Normal operation.	AVR1:*

## F M E A

Component	Mode	Comment	Output Voltage (V)
R129	Open	Normal operation.	AVR1:*
R130	Open	Normal operation.	AVR1:*
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:*
R137	Open	Normal operation.	AVR1:*
R143	Open	No Hazard.	AVR1:0
R146	Open	Normal operation.	AVR1:*
R148	Open	Normal operation.	AVR1:*
R149	Open	Normal operation.	AVR1:*
R150	Open	Normal operation.	AVR1:*
R151	Open	Normal operation.	AVR1:*
R152	Open	No Hazard.	AVR1:0
R153	Open	No Hazard.	AVR1:0
R155	Open	No Hazard.	AVR1:0
R157	Open	No Hazard.	AVR1:0
R158	Open	No Hazard.	AVR1:0
R159	Open	No Hazard.	AVR1:0
R160	Open	No Hazard.	AVR1:0
R161	Open	No Hazard.	AVR1:0
R162	Open	No Hazard.	AVR1:0

F M E A

Component	Mode	Comment	Output Voltage (V)
R165	Open	Normal operation.	AVR1:*
R201	Open	Normal operation.	AVR1:*
R202	Open	Normal operation.	AVR1:*
R203	Open	Normal operation.	AVR1:*
R204	Open	Normal operation.	AVR1:*
R205	Open	Normal operation.	AVR1:*
R206	Open	Normal operation.	AVR1:*
R207	Open	Normal operation.	AVR1:*
R208	Open	Normal operation.	AVR1:*
R211	Open	Normal operation.	AVR1:*
R212	Open	Normal operation.	AVR1:*
R213	Open	Normal operation.	AVR1:*
R214	Open	Normal operation.	AVR1:*
R216	Open	No Hazard.	AVR1:0
R217	Open	No Hazard.	AVR1:0
R221	Open	Normal operation.	AVR1:*
R222	Open	Normal operation.	AVR1:*
R226	Open	Normal operation.	AVR1:*
R227	Open	Normal operation.	AVR1:*
R229	Open	No Hazard.	AVR1:0
R230	Open	No Hazard.	AVR1:0
R231	Open	No Hazard.	AVR1:0
R232	Open	No Hazard.	AVR1:0
R233	Open	Normal operation.	AVR1:*

F M E A

Component	Mode	Comment	Output Voltage (V)
R234	Open	Normal operation.	AVR1:*
R236	Open	Output voltage decreased. No hazard.	AVR1:decreased
R237	Open	Output voltage decreased. No hazard.	AVR1:decreased
R255	Open	Normal operation.	AVR1:*
R281	Open	Normal operation.	AVR1:*
R501	Open	Normal operation.	AVR1:*
R502	Open	Normal operation.	AVR1:*
R503	Open	Normal operation.	AVR1:*
R504	Open	Normal operation.	AVR1:*
R505	Open	Normal operation.	AVR1:*
R506	Open	Normal operation.	AVR1:*
R507	Open	Normal operation.	AVR1:*
R508	Open	Normal operation.	AVR1:*
R511	Open	Normal operation.	AVR1:*
R512	Open	Normal operation.	AVR1:*
R513	Open	Normal operation.	AVR1:*
R514	Open	Normal operation.	AVR1:*
R515	Open	Normal operation.	AVR1:*
R516	Open	Normal operation.	AVR1:*
R517	Open	Normal operation.	AVR1:*
R518	Open	Normal operation.	AVR1:*
R519	Open	Normal operation.	AVR1:*
R520	Open	Normal operation.	AVR1:*
R521	Open	Normal operation.	AVR1:*

## F M E A

Component	Mode	Comment	Output Voltage (V)
R522	Open	Normal operation.	AVR1:*
R551	Open	Normal operation.	AVR1:*
R552	Open	Normal operation.	AVR1:*
R553	Open	Normal operation.	AVR1:*
R554	Open	Normal operation.	AVR1:*
R555	Open	Normal operation.	AVR1:*
R556	Open	Normal operation.	AVR1:*
R557	Open	Normal operation.	AVR1:*
R558	Open	Normal operation.	AVR1:*
R559	Open	Normal operation.	AVR1:*
R560	Open	Normal operation.	AVR1:*
R561	Open	Normal operation.	AVR1:*
R562	Open	Normal operation.	AVR1:*
R563	Open	Normal operation.	AVR1:*
R564	Open	Normal operation.	AVR1:*
R565	Open	Normal operation.	AVR1:*
R566	Open	Normal operation.	AVR1:*
R567	Open	Normal operation.	AVR1:*
R601	Open	Output voltage decreased. No hazard.	AVR1:decreased
R602	Open	Output voltage decreased. No hazard.	AVR1:decreased
R603	Open	Normal operation.	AVR1:*
R604	Open	Output voltage decreased. No hazard.	AVR1:decreased
R605	Open	No Hazard.	AVR1:0
R606	Open	No Hazard.	AVR1:0



F M E A

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

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
C216	Short		Normal operation.	AVR1:*
C217	Short		Normal operation.	AVR1:*
C503	Short		Normal operation.	AVR1:*
C504	Short		Normal operation.	AVR1:*
SS501	Open	Alternative	Normal operation.	AVR1:*
SS502	Open	Alternative	Normal operation.	AVR1:*
SS503	Open	Alternative	Normal operation.	AVR1:*
TR101	Open	D	No Hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	No Hazard.	AVR1:0
	Short	D-S	No Hazard.	AVR1:0
		S-G	No Hazard.	AVR1:0
		G-D	No Hazard.	AVR1:0
TR201	Open	D	No Hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	No Hazard.	AVR1:0
	Short	D-S	No Hazard.	AVR1:0
		S-G	No Hazard.	AVR1:0
		G-D	No Hazard.	AVR1:0