COSEL

ABNORMAL TEST RESULT

OF MODEL LHA15F

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   : 2/10 ～ 9/10)
   (Abnormal Test Result: 10/10 ～ 10/10)

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
C201	Open	See page 10.	
	Short	F101 opened,No hazard.	AVR1:0
C202	Open	Normal operation.	AVR1:*
	Short	See page 10.	
C203	Open	Normal operation.	AVR1:*
	Short	See page 10.	
C204	Open	See page 10.	
	Short	See page 10.	
C212	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C221	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C223	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C224	Open	Normal operation.	AVR1:*
	Short	See page 10.	
C231	Open	Normal operation.	AVR1:*
	Short	F101 opened,No hazard.	AVR1:0
C241 (Except -3R3)	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	No Hazard.	AVR1:0
C242	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	No Hazard.	AVR1:0

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Component	Mode	Comment	Output Voltage (V)
C501	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C502	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C503	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C504	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C505 (Except -12,-24)	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C511	Open	See page 10.	
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C512 (Only -3R3)	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C601	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C602 (Except -3R3)	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C603	Open	Normal operation.	AVR1:*
	Short	No Hazard	AVR1:0
C604	Open	Normal operation.	AVR1:*
	Short	No Hazard	AVR1:0
C621	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased. No hazard.	AVR1:decreased

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Component	Mode		Comment	Output Voltage (V)
D201	Open		See page 10.	
	Short		See page 10.	
D211	Open		Normal operation.	AVR1:*
	Short		F101 opened, No hazard.	AVR1:0
D212	Open		See page 10.	
	Short		Normal operation.	AVR1:*
D221	Open		See page 10.	
	Short		No Hazard.	AVR1:0
D222	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
D501	Open		No Hazard.	AVR1:0
	Short		Output voltage decreased. No hazard.	AVR1:decreased
D502 (Except -15,-24)	Open		See page 10.	
	Short		Output voltage decreased. No hazard.	AVR1:decreased
IC201	Open	1	No Hazard.	AVR1:0
		2	Output voltage decreased. No hazard.	AVR1:decreased
		3	F101 opened, No hazard.	AVR1:0
		4	No Hazard.	AVR1:0
		5	No Hazard.	AVR1:0
		6	No Hazard.	AVR1:0
		8	Normal operation.	AVR1:*
	Short	1-2	No Hazard.	AVR1:0
		2-3	No Hazard.	AVR1:0
		3-4	F101 opened, No hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
IC201	Short	5-6	F101 opened, No hazard.	AVR1:0
IC601	Open	1	Normal operation.	AVR1:*
		2	Normal operation.	AVR1:*
		3	Output voltage decreased. No hazard.	AVR1:decreased
		4	Output voltage decreased. No hazard.	AVR1:decreased
		5	No Hazard.	AVR1:0
	Short	1-2	Normal operation.	AVR1:*
		2-3	No Hazard.	AVR1:0
		4-5	No Hazard.	AVR1:0
J101	Open		Normal operation.	AVR1:*
J211	Open		See page 10.	
J221	Open		No Hazard.	AVR1:0
J601	Open		No Hazard.	AVR1:0
L101	Open	1	No Hazard.	AVR1:0
		2	No Hazard.	AVR1:0
		3	No Hazard.	AVR1:0
		4	No Hazard.	AVR1:0
L201	Open		F101 opened, No hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
L221	Open		See page 10.	
	Short		No Hazard.	AVR1:0
L501	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
PC241	Open	A,K	Output voltage decreased. No hazard.	AVR1:decreased

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Component	Mode		Comment	Output Voltage (V)
PC241	Open	C,E	Output voltage decreased. No hazard.	AVR1:decreased
	Short	A-K	Output voltage decreased. No hazard.	AVR1:decreased
		C-E	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:*
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:*
R211	Open		Output voltage decreased. No hazard.	AVR1:decreased
R213	Open		No Hazard.	AVR1:0
R214	Open		No Hazard.	AVR1:0
R215	Open		Normal operation.	AVR1:*
R216	Open		No Hazard.	AVR1:0
R221	Open		See page 10.	
R222	Open		No Hazard.	AVR1:0
R223	Open		No Hazard.	AVR1:0
R224	Open		No Hazard.	AVR1:0
R225	Open		Normal operation.	AVR1:*

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Component	Mode		Comment	Output Voltage (V)
R231	Open		F101 opened, No hazard.	AVR1:0
R232	Open		Output voltage decreased. No hazard.	AVR1:decreased
R235	Open		No Hazard.	AVR1:0
R241	Open		Output voltage decreased. No hazard.	AVR1:decreased
R243 (Only -3R3,-5)	Open		Normal operation.	AVR1:*
R251	Open		Normal operation.	AVR1:*
R511	Open		Normal operation.	AVR1:*
R512 (Only -3R3,-5)	Open		Normal operation.	AVR1:*
R601 (Only -3R3,-5)	Open		Output voltage decreased. No hazard.	AVR1:decreased
R602	Open		Output voltage decreased. No hazard.	AVR1:decreased
R603 (Except -3R3,-5)	Open		Output voltage decreased. No hazard.	AVR1:decreased
R604	Open		Output voltage decreased. No hazard.	AVR1:decreased
R605	Open		No Hazard.	AVR1:0
R606	Open		No Hazard.	AVR1:0
R607	Open		No Hazard.	AVR1:0
R608 (Except -3R3)	Open		No Hazard.	AVR1:0
R609	Open		No Hazard.	AVR1:0
R621	Open		Normal operation.	AVR1:*
SS101	Open		No Hazard.	AVR1:0
	Short	1-4	F101 opened, No hazard.	AVR1:0
		2-3	F101 opened, No hazard.	AVR1:0
T201	Open	1	No Hazard.	AVR1:0
		2	No Hazard.	AVR1:0
		4	See page 10.	

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Component	Mode		Comment	Output Voltage (V)
T201	Open	5	See page 10.	
		7 (Only -3R3,-5)	See page 10.	
		8	No Hazard.	AVR1:0
		9	No Hazard.	AVR1:0
		10 (Only -3R3,-5)	See page 10.	
	Short	1-2	F101 opened, No hazard.	AVR1:0
		4-5	F101 opened, No hazard.	AVR1:0
		7-8	Normal operation.	AVR1:*
		8-9	F101 opened, No hazard.	AVR1:0
		9-10	Normal operation.	AVR1:*
TH101	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
TR201	Open	D	No Hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	No Hazard.	AVR1:0
	Short	D-S	See page 10.	
		S-G	No Hazard.	AVR1:0
		G-D	See page 10.	
TR211	Open	C	No Hazard.	AVR1:0
		E	No Hazard.	AVR1:0
		B	No Hazard.	AVR1:0
	Short	C-E	Normal operation.	AVR1:*
		E-B	No Hazard.	AVR1:0
		B-C	Normal operation.	AVR1:*

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Component	Mode		Comment	Output Voltage (V)
VR601　(Only -3R3)	Open	brush	Output voltage decreased. No hazard.	AVR1:decreased
			Output voltage decreased. No hazard.	AVR1:decreased
	Short		Output voltage increased. No hazard.	AVR1:increased
ZD221	Open		Normal operation.	AVR1:*
	Short		No Hazard.	AVR1:0

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ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
C201	Open		Output voltage decreased. No hazard.	AVR1:decreased
J211	Open		Output voltage decreased. No hazard.	AVR1:decreased
C202	Short		Normal operation.	AVR1:*
C203	Short		Normal operation.	AVR1:*
C204	Open		F101 opened, No hazard.	AVR1:0
	Short		Output voltage decreased. No hazard.	AVR1:decreased
C224	Short		Output voltage decreased. No hazard.	AVR1:decreased
C511	Open		Normal operation.	AVR1:*
D201	Open		F101 opened, No hazard.	AVR1:0
	Short		Output voltage decreased. No hazard.	AVR1:decreased
D212	Open		F101 opened, No hazard.	AVR1:0
D221	Open		Normal operation.	AVR1:*
D502 (Except -15,-24)	Open		Normal operation.	AVR1:*
L221	Open		Normal operation.	AVR1:*
R221	Open		Normal operation.	AVR1:*
T201	Open	4	Normal operation.	AVR1:*
		5	Normal operation.	AVR1:*
		7 (Only -3R3,-5)	Normal operation.	AVR1:*
		10 (Only -3R3,-5)	Normal operation.	AVR1:*
TR201	Short	D-S	F101 opened, No hazard.	AVR1:0
		G-D	F101 opened, No hazard.	AVR1:0

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