

## ABNORMAL TEST RESULT

OF MODEL MGFS152412, 15

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 : 2/19 ~ 15/19)

( Abnormal Test Result: 16/19 ~ 19/19)

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.	0[V]
C102	Open	Normal operation.	
	Short	F101 opened, No hazard.	0[V]
C103	Open	Normal operation.	
	Short	F101 opened, No hazard.	0[V]
C104	Open	Normal operation.	
	Short	Normal operation.	
C105	Open	Normal operation.	
	Short	F101 opened, No hazard.	0[V]
C111	Open	Normal operation.	
	Short	See 16 Page.	
C121	Open	Normal operation.	
	Short	No Hazard.	0[V]
C131	Open	Normal operation.	
	Short	Normal operation.	
C141	Open	Normal operation.	
	Short	No Hazard.	0[V]
C142	Open	Normal operation.	
	Short	Normal operation.	
C151	Open	Normal operation.	
	Short	No Hazard.	0[V]
C152	Open	No Hazard.	0[V]
	Short	No Hazard.	0[V]

F M E A

Component	Mode		Comment	Output Voltage (V)
C153	Open		Normal operation.	
	Short		No Hazard.	0[V]
C154	Open		Normal operation.	
	Short		No Hazard.	0[V]
C161	Open		Normal operation.	
	Short		See 16 Page.	
C162	Open		Normal operation.	
	Short		F101 opened, No hazard.	0[V]
C171	Open		See 16 Page.	
	Short		No Hazard.	0[V]
C172	Open		Normal operation.	
	Short		F101 opened, No hazard.	0[V]
C181	Open		Normal operation.	
	Short		F101 opened, No hazard.	0[V]
C201	Open	Only 12	Normal operation.	
	Short		Output voltage decreased. No hazard.	
C202	Open		See 16 Page.	
	Short		See 16 Page.	
C203	Open		Normal operation.	
	Short		Output voltage decreased. No hazard.	
C204	Open		Normal operation.	
	Short		Output voltage decreased. No hazard.	
C205	Open		Normal operation.	
	Short		Output voltage decreased. No hazard.	

## F M E A

Component	Mode		Comment	Output Voltage (V)
C206	Open		Normal operation.	
	Short		Output voltage decreased. No hazard.	
C207	Open		Normal operation.	
	Short		Output voltage decreased. No hazard.	
C221	Open		Normal operation.	
	Short		Output voltage decreased. No hazard.	
C222	Open		Normal operation.	
	Short		Output voltage decreased. No hazard.	
C223	Open	Only 12	Normal operation.	
	Short	Only 12	Output voltage decreased. No hazard.	
C224	Open		Normal operation.	
	Short		Output voltage decreased. No hazard.	
C225	Open		Normal operation.	
	Short		See 16 Page.	
D141	Open		Normal operation.	
	Short		Normal operation.	
D161	Open		See 16 Page.	
	Short		See 16 Page.	
D171	Open		Normal operation.	
	Short		Normal operation.	
D173	Open		Normal operation.	
	Short		See 16 Page.	
D181	Open		Normal operation.	
	Short		F101 opened, No hazard.	0[V]

## F M E A

Component	Mode		Comment	Output Voltage (V)
D201	Open		Normal operation.	
	Short		See 16 Page.	
D202	Open		See 16 Page.	
	Short		Normal operation.	
D203	Open		See 16 Page.	
	Short		See 16 Page.	
D221	Open		Normal operation.	
	Short		Normal operation.	
D222	Open		Normal operation.	
	Short		Normal operation.	
IC121	Open	1	Normal operation.	
		2	No Hazard.	0[V]
		3	See 16 Page.	
		4	Normal operation.	
		5	Normal operation.	
		6	Normal operation.	
		7	Normal operation.	
		8	Normal operation.	
	Short	1-2	Normal operation.	
		2-3	No Hazard.	0[V]
		3-4	Normal operation.	
		5-6	See 16 Page.	
		6-7	See 16 Page.	
		7-8	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
IC151	Open	1	No Hazard.	0[V]
		2	No Hazard.	0[V]
		3	See 16 Page.	
		4	No Hazard.	0[V]
		5	See 16 Page.	
		6	No Hazard.	0[V]
		7	No Hazard.	0[V]
		8	No Hazard.	0[V]
	Short	1-2	No Hazard.	0[V]
		2-3	See 16 Page.	
		3-4	See 16 Page.	
		5-6	No Hazard.	0[V]
		6-7	F101 opened, No hazard.	0[V]
		7-8	Normal operation.	
IC221	Open	A	See 16 Page.	
		K	See 16 Page.	
		R	See 16 Page.	
	Short	A-K	Output voltage decreased. No hazard.	
		K-R	Output voltage decreased. No hazard.	
		R-A	See 16 Page.	
L101	Open		No Hazard.	0[V]
	Short		Normal operation.	
L201	Open		See 17 Page.	
	Short		Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
PC151	Open	LED. A, K	See 17 Page.	
		TR. C, E	See 17 Page.	
	Short	LED. A-K	See 17 Page.	
		TR. C-E	No Hazard.	0[V]
R111	Open		Normal operation.	
R112	Open		Normal operation.	
R113	Open		Normal operation.	
R114	Open		Normal operation.	
R121	Open		No Hazard.	0[V]
R122	Open		No Hazard.	0[V]
R123	Open		Normal operation.	
R124	Open		Normal operation.	
R131	Open		Normal operation.	
R132	Open		Normal operation.	
R133	Open		Normal operation.	
R134	Open		Normal operation.	
R135	Open		Normal operation.	
R141	Open		Normal operation.	
R142	Open		Normal operation.	
R143	Open		Normal operation.	
R151	Open		No Hazard.	0[V]
R152	Open		No Hazard.	0[V]
R153	Open		Normal operation.	
R154	Open		No Hazard.	0[V]

## F M E A

Component	Mode		Comment	Output Voltage (V)
R155	Open		No Hazard.	0[V]
R156	Open		Normal operation.	
R157	Open		Normal operation.	
R158	Open		Output voltage decreased. No hazard.	
R159	Open		Normal operation.	
R161	Open		Normal operation.	
R162	Open		Normal operation.	
R163	Open		Normal operation.	
R164	Open		See 17 Page.	
R165	Open		Normal operation.	
R166	Open		Normal operation.	
R167	Open		Normal operation.	
R169	Open		Normal operation.	
R171	Open		No Hazard.	0[V]
R172	Open		F101 opened, No hazard.	0[V]
R173	Open		Normal operation.	
R174	Open		Normal operation.	
R175	Open		No Hazard.	0[V]
R176	Open		Normal operation.	
R177	Open		See 17 Page.	
R181	Open		Normal operation.	
R201	Open	Only 12	Normal operation.	
R202	Open		Normal operation.	
R203	Open		See 17 Page.	



## F M E A

Component	Mode		Comment	Output Voltage (V)
R204	Open		See 17 Page.	
R205	Open		Normal operation.	
R206	Open		Normal operation.	
R207	Open		Normal operation.	
R208	Open		Normal operation.	
R221	Open	Only 12	See 17 Page.	
R222	Open		See 17 Page.	
R223	Open		See 17 Page.	
R225	Open		Normal operation.	
R226	Open		Normal operation.	
R227	Open		Output voltage decreased. No hazard.	
R228	Open		Output voltage decreased. No hazard.	
R229	Open		See 17 Page.	
R231	Open	Only 12	Normal operation.	
R232	Open		Normal operation.	
R233	Open		Normal operation.	
R234	Open		Normal operation.	
R235	Open		Normal operation.	
T101	Open	1	Output voltage decreased. No hazard.	0[V]
		2	Output voltage decreased. No hazard.	0[V]
		3	Normal operation.	
		4	Normal operation.	
		5	See 17 Page.	
		6	See 17 Page.	

## F M E A

Component	Mode		Comment	Output Voltage (V)
T101	Open	7	Output voltage decreased. No hazard.	0[V]
		8	Output voltage decreased. No hazard.	0[V]
	Short	1-2	Output voltage decreased. No hazard.	
		2-3	Normal operation.	
		3-4	Output voltage decreased. No hazard.	
		5-6	Output voltage decreased. No hazard.	
		6-7	Normal operation.	
		7-8	Output voltage decreased. No hazard.	
T161	Open	1	No Hazard.	0[V]
		2	No Hazard.	0[V]
		3	See 17 Page.	
		4	See 17 Page.	
	Short	1-2	See 17 Page.	
		3-4	See 17 Page.	
T171	Open	1	See 17 Page.	
		2	See 17 Page.	
		3	See 17 Page.	
		4	See 17 Page.	
	Short	1-2	See 17 Page.	
		3-4	See 17 Page.	
TR101	Open	D	See 18 Page.	
		G	See 18 Page.	
		S	See 18 Page.	
	Short	D-S	See 18 Page.	

## F M E A

Component	Mode		Comment	Output Voltage (V)
TR101	Short	G-D	See 18 Page.	
		S-G	See 18 Page.	
TR111	Open	B	See 18 Page.	
		C	Normal operation.	
		E	See 18 Page.	
	Short	B-C	Normal operation.	
		C-E	Normal operation.	
		E-B	Normal operation.	
TR112	Open	B	Normal operation.	
		C	Normal operation.	
		E	Normal operation.	
	Short	B-C	Normal operation.	
		C-E	Normal operation.	
		E-B	Normal operation.	
TR113	Open	B	Normal operation.	
		C	Normal operation.	
		E	Normal operation.	
	Short	B-C	Normal operation.	
		C-E	Normal operation.	
		E-B	Normal operation.	
TR131	Open	B	Normal operation.	
		C	Normal operation.	
		E	Normal operation.	
	Short	B-C	No Hazard.	0[V]

## F M E A

Component	Mode		Comment	Output Voltage (V)
TR131	Short	C-E	No Hazard.	0[V]
		E-B	Normal operation.	
TR141	Open	B	Output voltage decreased. No hazard.	
		C	Output voltage decreased. No hazard.	
		E	Output voltage decreased. No hazard.	
	Short	B-C	Normal operation.	
		C-E	Normal operation.	
		E-B	Output voltage decreased. No hazard.	
TR151	Open	B	No Hazard.	0[V]
		C	Normal operation.	
		E	No Hazard.	0[V]
	Short	B-C	Normal operation.	
		C-E	Normal operation.	
		E-B	Normal operation.	
TR152	Open	B	Normal operation.	
		C	Normal operation.	
		E	Normal operation.	
	Short	B-C	No Hazard.	0[V]
		C-E	No Hazard.	0[V]
		E-B	Normal operation.	
TR161	Open	1E	Normal operation.	
		2B	Normal operation.	
		3C	Normal operation.	
		4E	Output voltage decreased. No hazard.	

## F M E A

Component	Mode		Comment	Output Voltage (V)
TR161	Open	5B	Normal operation.	
		6C	Normal operation.	
	Short	1E-2B	Normal operation.	
		2B-6C	Output voltage decreased. No hazard.	
		3C-4E	Normal operation.	
		4E-5B	Normal operation.	
		5B-3C	No Hazard.	0[V]
		6C-1E	Output voltage decreased. No hazard.	
TR171	Open	B	No Hazard.	0[V]
		C	See 18 Page.	
		E	No Hazard.	0[V]
	Short	B-C	Normal operation.	
		C-E	F101 opened, No hazard.	0[V]
		E-B	Normal operation.	
TR172	Open	B	Normal operation.	
		C	Normal operation.	
		E	Normal operation.	
	Short	B-C	No Hazard.	0[V]
		C-E	No Hazard.	0[V]
		E-B	F101 opened, No hazard.	0[V]
TR173	Open	B	Normal operation.	
		C	Normal operation.	
		E	Normal operation.	
	Short	B-C	No Hazard.	0[V]

F M E A

Component	Mode		Comment	Output Voltage (V)
TR173	Short	C-E	No Hazard.	0[V]
		E-B	F101 opened, No hazard.	0[V]
TR174	Open	B	See 18 Page.	
		C	See 18 Page.	
		E	See 18 Page.	
	Short	B-C	See 18 Page.	
		C-E	See 18 Page.	
		E-B	See 18 Page.	
TR201	Open	D	See 18 Page.	
		G	See 18 Page.	
		S	See 18 Page.	
	Short	D-S	See 18 Page.	
		G-D	See 18 Page.	
		S-G	See 18 Page.	
TR202	Open	1S	See 18 Page.	
		2G	See 18 Page.	
		3D	See 18 Page.	
		4S	See 19 Page.	
		5G	See 19 Page.	
		6D	See 19 Page.	
	Short	1S-2G	See 19 Page.	
		2G-6D	Output voltage decreased. No hazard.	
		3D-4S	See 19 Page.	
		4S-5G	See 19 Page.	

F M E A

Component	Mode		Comment	Output Voltage (V)
TR202	Short	5G-3D	See 19 Page.	
		6D-1S	Output voltage decreased. No hazard.	
ZD111	Open		Normal operation.	
	Short		Normal operation.	
ZD112	Open		Normal operation.	
	Short		Normal operation.	
ZD221	Open	Only 15	See 19 Page.	
	Short	Only 15	Normal operation.	
ZD223	Open		Normal operation.	
	Short		Output voltage decreased. No hazard.	

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
C111	Short		No Hazard.	0[V]
C161	Short		F101 opened, No hazard.	0[V]
C171	Open		No Hazard.	
C202	Open		No Hazard.	
	Short		No Hazard.	
C225	Short		Normal operation.	
D161	Open		F101 opened, No hazard.	0[V]
	Short		Normal operation.	
D173	Short		No Hazard.	
D201	Short		Output voltage decreased. No hazard.	
D202	Open		No Hazard.	
D203	Open		No Hazard.	
	Short		Normal operation.	
IC121	Open	3	Normal operation.	
	Short	5-6	No Hazard.	0[V]
		6-7	Normal operation.	
IC151	Open	3	F101 opened, No hazard.	0[V]
		5	No Hazard.	0[V]
	Short	2-3	F101 opened, No hazard.	0[V]
		3-4	No Hazard.	0[V]
IC221	Open	A	Output voltage increased. No hazard.	
		K	Output voltage increased. No hazard.	
		R	Output voltage increased. No hazard.	
	Short	R-A	Output voltage increased. No hazard.	



ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
L201	Open		R207 opened, No hazard.	
PC151	Open	LED. A, K	Output voltage increased. No hazard.	
		TR. C, E	Output voltage increased. No hazard.	
	Short	LED. A-K	Output voltage increased. No hazard.	
R164	Open		F101 opened, No hazard.	0[V]
R177	Open		Normal operation.	
R203	Open		No Hazard.	
R204	Open		No Hazard.	
R221	Open	Only 12	Output voltage increased. No hazard.	
R222	Open		Output voltage increased. No hazard.	
R223	Open		Output voltage increased. No hazard.	
R229	Open		Output voltage increased. No hazard.	
T101	Open	5	No Hazard.	
		6	No Hazard.	
T161	Open	3	F101 opened, No hazard.	0[V]
		4	F101 opened, No hazard.	0[V]
	Short	1-2	F101 opened, No hazard.	0[V]
		3-4	F101 opened, No hazard.	0[V]
T171	Open	1	No Hazard.	
		2	No Hazard.	
		3	No Hazard.	
		4	No Hazard.	
	Short	1-2	No Hazard.	
		3-4	No Hazard.	

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
TR101	Open	D	No Hazard.	0[V]
		G	No Hazard.	0[V]
		S	No Hazard.	0[V]
	Short	D-S	F101 opened, No hazard.	0[V]
		G-D	No Hazard.	0[V]
		S-G	No Hazard.	0[V]
TR111	Open	B	Normal operation.	
		E	Normal operation.	
TR171	Open	C	No Hazard.	
TR174	Open	B	No Hazard.	
		C	No Hazard.	
		E	No Hazard.	
	Short	B-C	No Hazard.	
		C-E	F101 opened, No hazard.	0[V]
		E-B	No Hazard.	
TR201	Open	D	No Hazard.	
		G	No Hazard.	
		S	No Hazard.	
	Short	D-S	Output voltage decreased. No hazard.	
		G-D	F101 opened, No hazard.	0[V]
		S-G	No Hazard.	
TR202	Open	1S	No Hazard.	
		2G	No Hazard.	
		3D	No Hazard.	

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
TR202	Open	4S	No Hazard.	
		5G	No Hazard.	
		6D	No Hazard.	
	Short	1S-2G	No Hazard.	
		3D-4S	No Hazard.	
		4S-5G	No Hazard.	
		5G-3D	No Hazard.	
ZD221	Open	Only 15	Output voltage increased. No hazard.	