

## ABNORMAL TEST RESULT

OF MODEL MHFW312□□

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)
C11	Open	Normal operation.	
	Short	See page 10.	
C12	Open	No Hazard.	AVR1:0 AVR2:0
	Short	External Fuse opened, No hazard.	AVR1:0 AVR2:0
C13	Open	Normal operation.	
	Short	No Hazard.	AVR1:0 AVR2:0
C14	Open	Normal operation.	
	Short	Normal operation.	
C21	Open	Normal operation.	
	Short	No Hazard.	AVR1:0 AVR2:0
C22	Open	Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
	Short	External Fuse opened, No hazard.	AVR1:0 AVR2:0
C31	Open	Normal operation.	
	Short	No Hazard.	AVR1:0 AVR2:0
C32	Open	Normal operation.	
	Short	No Hazard.	AVR1:0 AVR2:0
C33	Open	Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
	Short	External Fuse opened, No hazard.	AVR1:0 AVR2:0
C34	Open	Normal operation.	
	Short	Normal operation.	
C51	Open	Normal operation.	
	Short	See page 10.	
C52	Open	Normal operation.	
	Short	See page 10.	

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Component	Mode	Comment	Output Voltage (V)
C71	Open	Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
	Short	Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
C72	Open	Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
	Short	Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
C73	Open	Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
	Short	Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
C74	Open	Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
	Short	Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
C101	Open	Normal operation.	
	Short	See page 10.	
C102	Open	Normal operation.	
	Short	See page 10.	
C103	Open	Normal operation.	
	Short	External Fuse opened, No hazard.	AVR1:0    AVR2:0
C111	Open	Normal operation.	
	Short	External Fuse opened, No hazard.	AVR1:0    AVR2:0
C201	Open	Normal operation.	
	Short	See page 10.	
C202	Open	Normal operation.	
	Short	See page 10.	
C203	Open	Normal operation.	
	Short	See page 10.	
C204	Open	Normal operation.	
	Short	See page 10.	

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Component	Mode		Comment	Output Voltage (V)
C211	Open		Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
	Short		External Fuse opened, No hazard.	AVR1:0 AVR2:0
D11	Open		Normal operation.	
	Short		Normal operation.	
D21	Open		Normal operation.	
	Short		External Fuse opened, No hazard.	AVR1:0 AVR2:0
D31	Open		Normal operation.	
	Short		No Hazard.	AVR1:0 AVR2:0
D201	Open		No Hazard.	AVR1:0 AVR2:0
	Short		External Fuse opened, No hazard.	AVR1:0 AVR2:0
D202	Open		No Hazard.	AVR1:0 AVR2:0
	Short		External Fuse opened, No hazard.	AVR1:0 AVR2:0
IC11	Open	1	No Hazard.	AVR1:0 AVR2:0
		2	See page 10.	
		3	No Hazard.	AVR1:0 AVR2:0
		4	Normal operation.	
		5	No Hazard.	AVR1:0 AVR2:0
		6	No Hazard.	AVR1:0 AVR2:0
		7	External Fuse opened, No hazard.	AVR1:0 AVR2:0
		8	No Hazard.	AVR1:0 AVR2:0
	Short	1-2	External Fuse opened, No hazard.	AVR1:0 AVR2:0
		2-3	Normal operation.	
		3-4	Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
		5-6	No Hazard.	AVR1:0 AVR2:0

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Component	Mode		Comment	Output Voltage (V)
IC11	Short	6-7	Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
		7-8	Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
IC12	Open	1	External Fuse opened, No hazard.	AVR1:0 AVR2:0
		2	Normal operation.	
		3	External Fuse opened, No hazard.	AVR1:0 AVR2:0
		4	Normal operation.	
		5	See page 10.	
		6	No Hazard.	AVR1:0 AVR2:0
	Short	1-2	No Hazard.	AVR1:0 AVR2:0
		2-3	No Hazard.	AVR1:0 AVR2:0
		4-5	External Fuse opened, No hazard.	AVR1:0 AVR2:0
		5-6	No Hazard.	AVR1:0 AVR2:0
IC71	Open	1	No Hazard.	AVR1:0 AVR2:0
		3	No Hazard.	AVR1:0 AVR2:0
		6	No Hazard.	AVR1:0 AVR2:0
L101	Open		No Hazard.	AVR1:0 AVR2:0
	Short		Normal operation.	
PC11	Open	A, K	No Hazard.	AVR1:0 AVR2:0
		C, E	No Hazard.	AVR1:0 AVR2:0
	Short	A-K	No Hazard.	AVR1:0 AVR2:0
		C-E	No Hazard.	AVR1:0 AVR2:0
PTH31	Open		No Hazard.	AVR1:0 AVR2:0
	Short		Normal operation.	
R11	Open		No Hazard.	AVR1:0 AVR2:0

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Component	Mode	Comment	Output Voltage (V)
R12	Open	No Hazard.	AVR1:0 AVR2:0
R13	Open	Normal operation.	
R14	Open	External Fuse opened, No hazard.	AVR1:0 AVR2:0
R15	Open	External Fuse opened, No hazard.	AVR1:0 AVR2:0
R16	Open	External Fuse opened, No hazard.	AVR1:0 AVR2:0
R17	Open	Normal operation.	
R18	Open	No Hazard.	AVR1:0 AVR2:0
R21	Open	Normal operation.	
R22	Open	Normal operation.	
R23	Open	Normal operation.	
R24	Open	Normal operation.	
R25	Open	Normal operation.	
R26	Open	Normal operation.	
R27	Open	Normal operation.	
R31	Open	External Fuse opened, No hazard.	AVR1:0 AVR2:0
R33	Open	Normal operation.	
R41	Open	Normal operation.	
R42	Open	No Hazard.	AVR1:0 AVR2:0
R71	Open	No Hazard.	AVR1:0 AVR2:0
R72	Open	No Hazard.	AVR1:0 AVR2:0
R73	Open	Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
R74	Open	Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
R75	Open	Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
R76	Open	Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased

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Component	Mode		Comment	Output Voltage (V)
R77	Open		Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
R101	Open		Normal operation.	
R111	Open		Normal operation.	
R113	Open		External Fuse opened, No hazard.	AVR1:0    AVR2:0
SS41	Open	1	No Hazard.	AVR1:0    AVR2:0
		2	Normal operation.	
		3	No Hazard.	AVR1:0    AVR2:0
	Short	1-2	Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
		2-3	Normal operation.	
		3-1	Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
TR12	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	Normal operation.	
		E-B	Normal operation.	
		B-C	External Fuse opened, No hazard.	AVR1:0    AVR2:0
TR13	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	No Hazard.	AVR1:0    AVR2:0
		E-B	Normal operation.	
		B-C	Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased
TR14	Open	C	Normal operation.	
		E	Normal operation.	

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Component	Mode		Comment	Output Voltage (V)
TR14	Open	B	Normal operation.	
	Short	C-E	No Hazard.	AVR1:0 AVR2:0
		E-B	Normal operation.	
		B-C	No Hazard.	AVR1:0 AVR2:0
TR21	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	Normal operation.	
		E-B	Normal operation.	
		B-C	External Fuse opened, No hazard.	AVR1:0 AVR2:0
TR101	Open	D	See page 10.	
		S	See page 10.	
		G	See page 10.	
	Short	D-S	See page 10.	
		S-G	See page 10.	
		G-D	See page 10.	
TR111	Open	D	Normal operation.	
		S	Normal operation.	
		G	External Fuse opened, No hazard.	AVR1:0 AVR2:0
	Short	D-S	External Fuse opened, No hazard.	AVR1:0 AVR2:0
		S-G	Normal operation.	
		G-D	External Fuse opened, No hazard.	AVR1:0 AVR2:0
ZD11	Open		Normal operation.	
	Short		Output voltage decreased. No Hazard.	AVR1:decreased AVR2:decreased





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Component	Mode	Comment	Output Voltage (V)
ZD21	Open	Normal operation.	
	Short	No Hazard.	AVR1:0    AVR2:0
ZD23	Open	Normal operation.	
	Short	Normal operation.	
ZD24	Open	Normal operation.	
	Short	Normal operation.	
ZD71	Open	Normal operation.	
	Short	No Hazard.	AVR1:decreased AVR2:decreased
ZD72	Open	Normal operation.	
	Short	No Hazard.	AVR1:decreased AVR2:decreased

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)	
C11	Short		External Fuse opened, No hazard.	AVR1:0	AVR2:0
C51	Short		No Hazard.	AVR1:0	AVR2:0
C52	Short		No Hazard.	AVR1:0	AVR2:0
C101	Short		External Fuse opened, No hazard.	AVR1:0	AVR2:0
C102	Short		External Fuse opened, No hazard.	AVR1:0	AVR2:0
C201	Short		No Hazard.	AVR1:0	AVR2:0
C202	Short		No Hazard.	AVR1:0	AVR2:0
C203	Short		No Hazard.	AVR1:0	AVR2:0
C204	Short		No Hazard.	AVR1:0	AVR2:0
IC11	Open	2	External Fuse opened, No hazard.	AVR1:0	AVR2:0
IC12	Open	5	External Fuse opened, No hazard.	AVR1:0	AVR2:0
TR101	Open	D	No Hazard.	AVR1:0	AVR2:0
		S	No Hazard.	AVR1:0	AVR2:0
		G	External Fuse opened, No hazard.	AVR1:0	AVR2:0
	Short	D-S	External Fuse opened, No hazard.	AVR1:0	AVR2:0
		S-G	No Hazard.	AVR1:0	AVR2:0
		G-D	External Fuse opened, No hazard.	AVR1:0	AVR2:0