

ABNORMAL TEST RESULT

OF MODEL MHFS648□□

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
	Short	External Fuse opened, No hazard.	AVR1:0
C13	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C14	Open	Normal operation.	
	Short	Normal operation.	
C21	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C22	Open	Output voltage decreased. No Hazard.	AVR1:decreased
	Short	External Fuse opened, No hazard.	AVR1:0
C31	Open	Normal operation.	
	Short	External Fuse opened, No hazard.	AVR1:0
C32	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C33	Open	Output voltage decreased. No Hazard.	AVR1:decreased
	Short	No Hazard.	AVR1:0
C34	Open	Normal operation.	
	Short	Normal operation.	
C51	Open	Normal operation.	
	Short	See page 10.	
C52 (Only 3.3, 09)	Open	Normal operation.	
	Short	See page 10.	



F M E A

Component	Mode	Comment	Output Voltage (V)
C71	Open	Output voltage decreased. No Hazard.	AVR1:decreased
	Short	Output voltage decreased. No Hazard.	AVR1:decreased
C72 (Except 12,15)	Open	Output voltage decreased. No Hazard.	AVR1:decreased
	Short	Output voltage decreased. No Hazard.	AVR1:decreased
C73	Open	Output voltage decreased. No Hazard.	AVR1:decreased
	Short	Output voltage decreased. No Hazard.	AVR1: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
C111	Open	Normal operation.	
	Short	Normal operation.	
C112	Open	Normal operation.	
	Short	External Fuse opened, No hazard.	AVR1:0
C201	Open	Normal operation.	
	Short	See page 10.	
C202	Open	Normal operation.	
	Short	See page 10.	
C203	Open	Normal operation.	
	Short	See page 10.	
C211	Open	Normal operation.	
	Short	External Fuse opened, No hazard.	AVR1:0



F M E A

Component	Mode	Comment	Output Voltage (V)	
CN101	Open	External Fuse opened, No hazard.	AVR1:0	
CN102	Open	No Hazard.	AVR1:0	
CN103	Open	No Hazard.	AVR1:0	
CN104	Open	No Hazard.	AVR1:0	
CN105	Open	No Hazard.	AVR1:0	
CN106	Open	No Hazard.	AVR1:0	
D11	Open	Normal operation.		
	Short	Normal operation.		
D21	Open	See page 10.		
	Short	No Hazard.	AVR1:0	
D22	Open	Normal operation.		
	Short	Normal operation.		
D31	Open	Normal operation.		
	Short	External Fuse opened, No hazard.	AVR1:0	
D201	Open	No Hazard.	AVR1:0	
	Short	External Fuse opened, No hazard.	AVR1:0	
D202	Open	No Hazard.	AVR1:0	
	Short	External Fuse opened, No hazard.	AVR1:0	
IC11	Open	1	No Hazard.	AVR1:0
		2	See page 10.	
		3	No Hazard.	AVR1:0
		4	Normal operation.	
		5	No Hazard.	AVR1:0
		6	No Hazard.	AVR1:0



F M E A

Component	Mode		Comment	Output Voltage (V)
IC11	Open	7	External Fuse opened, No hazard.	AVR1:0
		8	No Hazard.	AVR1:0
	Short	1-2	External Fuse opened, No hazard.	AVR1:0
		2-3	Normal operation.	
		3-4	Output voltage decreased. No Hazard.	AVR1:decreased
		5-6	No Hazard.	AVR1:0
		6-7	Output voltage decreased. No Hazard.	AVR1:decreased
		7-8	Output voltage decreased. No Hazard.	AVR1:decreased
IC12	Open	1	External Fuse opened, No hazard.	AVR1:0
		2	Normal operation.	
		3	External Fuse opened, No hazard.	AVR1:0
		4	Normal operation.	
		5	See page 10.	
		6	No Hazard.	AVR1:0
	Short	1-2	No Hazard.	AVR1:0
		2-3	No Hazard.	AVR1:0
		4-5	External Fuse opened, No hazard.	AVR1:0
		5-6	No Hazard.	AVR1:0
IC71	Open	1	No Hazard.	AVR1:0
		3	No Hazard.	AVR1:0
		6	No Hazard.	AVR1:0
L101	Open	No Hazard.	AVR1:0	
	Short	Normal operation.		
L201	Open	No Hazard.	AVR1:0	



F M E A

Component	Mode		Comment	Output Voltage (V)
L201	Short		Normal operation.	
PC11	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
PTH31	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
R11	Open		No Hazard.	AVR1:0
R12	Open		No Hazard.	AVR1:0
R13	Open		Normal operation.	
R14	Open		External Fuse opened, No hazard.	AVR1:0
R15	Open		External Fuse opened, No hazard.	AVR1:0
R16	Open		External Fuse opened, No hazard.	AVR1:0
R17	Open		Normal operation.	
R18	Open		No Hazard.	AVR1:0
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.	
R28	Open		Normal operation.	
R31	Open		External Fuse opened, No hazard.	AVR1:0



F M E A

Component	Mode		Comment	Output Voltage (V)
R33	Open		Normal operation.	
R41	Open		Normal operation.	
R42	Open		No Hazard.	AVR1:0
R71	Open		No Hazard.	AVR1:0
R72	Open		No Hazard.	AVR1:0
R73	Open		Output voltage decreased. No Hazard.	AVR1:decreased
R74	Open		Output voltage decreased. No Hazard.	AVR1:decreased
R75	Open		Output voltage decreased. No Hazard.	AVR1:decreased
R76	Open		Output voltage decreased. No Hazard.	AVR1:decreased
R77	Open		Output voltage decreased. No Hazard.	AVR1:decreased
R78	Open		Normal operation.	
R81	Open		Normal operation.	
R101	Open		Normal operation.	
R111	Open		External Fuse opened, No hazard.	AVR1:0
R112	Open		Normal operation.	
R113	Open		Normal operation.	
R114	Open		Normal operation.	
SS41	Short	1-2	Output voltage decreased. No Hazard.	AVR1:decreased
		2-3	Normal operation.	
		3-1	Output voltage decreased. No Hazard.	AVR1:decreased
TR12	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	External Fuse opened, No hazard.	AVR1:0



F M E A

Component	Mode		Comment	Output Voltage (V)
TR12	Short	E-B	Normal operation.	
		B-C	External Fuse opened, No hazard.	AVR1:0
TR13	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	No Hazard.	AVR1:0
		E-B	Normal operation.	
		B-C	Output voltage decreased. No Hazard.	AVR1:decreased
TR14	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	No Hazard.	AVR1:0
		E-B	Normal operation.	
		B-C	No Hazard.	AVR1:0
TR21	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	No Hazard.	AVR1:0
		E-B	Normal operation.	
		B-C	Normal operation.	
TR101	Open	D	See page 10.	
		S	See page 10.	
		G	See page 10.	
	Short	D-S	See page 10.	



F M E A

Component	Mode		Comment	Output Voltage (V)
TR101	Short	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
	Short	D-S	External Fuse opened, No hazard.	AVR1:0
		S-G	Normal operation.	
		G-D	External Fuse opened, No hazard.	AVR1:0
ZD11	Open		Normal operation.	
	Short		Output voltage decreased. No Hazard.	AVR1:decreased
ZD21	Open		External Fuse opened, No hazard.	AVR1:0
	Short		No Hazard.	AVR1:0
ZD23	Open		Normal operation.	
	Short		Normal operation.	
ZD24	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
ZD71	Open		Normal operation.	
	Short		No Hazard.	AVR1:0



ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
C11	Short		External Fuse opened, No hazard.	AVR1:0
C51	Short		No Hazard.	AVR1:0
C52	Short		No Hazard.	AVR1:0
C101	Short		External Fuse opened, No hazard.	AVR1:0
C102	Short		External Fuse opened, No hazard.	AVR1:0
C201	Short		No Hazard.	AVR1:0
C202	Short		No Hazard.	AVR1:0
C203	Short		No Hazard.	AVR1:0
D21	Open		Normal operation.	
IC11	Open	2	No Hazard.	AVR1:0
IC12	Open	5	No Hazard.	AVR1:0
TR101	Open	D	No Hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	No Hazard.	AVR1:0
	Short	D-S	External Fuse opened, No hazard.	AVR1:0
		S-G	No Hazard.	AVR1:0
		G-D	External Fuse opened, No hazard.	AVR1:0