

ABNORMAL TEST RESULT

OF MODEL BRFS50

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 : 2/21 ~ 19/21)

(Abnormal Test Result: 20/21 ~ 21/21)

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	External Fuse opened, No hazard.	AVR1:0
C102	Open	Normal operation.	
	Short	External Fuse opened, No hazard.	AVR1:0
C103	Open	Normal operation.	
	Short	External Fuse opened, No hazard.	
C104	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C111	Open	Normal operation.	
	Short	External Fuse opened, No hazard.	AVR1:0
C112	Open	Normal operation.	
	Short	External Fuse opened, No hazard.	AVR1:0
C113	Open	Normal operation.	
	Short	External Fuse opened, No hazard.	AVR1:0
C114	Open	Normal operation.	
	Short	External Fuse opened, No hazard.	AVR1:0
C115	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C121	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C122	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C123	Open	No hazard.	AVR1:0
	Short	No hazard.	AVR1:0

F M E A

Component	Mode	Comment	Output Voltage (V)
C131	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C132	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C133	Open	No hazard.	AVR1:0
	Short	No hazard.	AVR1:0
C141	Open	Normal operation.	
	Short	See 20 Page.	
C142	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C143	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C151	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C152	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C153	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C201	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C202	Open	Normal operation.	
	Short	Normal operation.	
C203	Open	Normal operation.	
	Short	Normal operation.	

F M E A

Component	Mode	Comment	Output Voltage (V)
C204	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C205	Open	Normal operation.	
	Short	Normal operation.	
C206	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C207	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C301	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C302	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C303	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C304	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C305	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C306	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C307	Open	See 20 Page.	
	Short	No hazard.	AVR1:0
C308	Open	Normal operation.	
	Short	Normal operation.	

F M E A

Component	Mode	Comment	Output Voltage (V)
C309	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C310	Open	Normal operation.	
	Short	Output voltage increased. No hazard.	AVR1:Increased
C311	Open		
	Short	Output voltage increased. No hazard.	AVR1:Increased
C312	Open	Normal operation.	
	Short	Output voltage increased. No hazard.	AVR1:Increased
C313	Open	Normal operation.	
	Short	Output voltage increased. No hazard.	AVR1:Increased
C314	Open	Normal operation.	
	Short	Normal operation.	
C401	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C402	Open	Normal operation.	
	Short	See 20 Page.	
C403	Open	No hazard.	AVR1:0
	Short	Normal operation.	
C404	Open	No hazard.	
	Short	No hazard.	AVR1:0
C405	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C406	Open	Normal operation.	
	Short	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
C407	Open		Normal operation.	
	Short		Normal operation.	
C501	Open		Normal operation.	
	Short		No hazard.	AVR1:0
C502	Open		Normal operation.	
	Short		See 20 Page.	
C503	Open		No hazard.	AVR1:0
	Short		Normal operation.	
C504	Open		No hazard.	
	Short		No hazard.	AVR1:0
C506	Open		Normal operation.	
	Short		Normal operation.	
C507	Open		Normal operation.	
	Short		Normal operation.	
D201	Open		Normal operation.	
	Short		Normal operation.	
D202	Open		No hazard.	AVR1:0
	Short		Normal operation.	
IC101	Open	1	No hazard.	AVR1:0
		2	Normal operation.	
		3	Normal operation.	
		4	No hazard.	AVR1:0
		5	Normal operation.	
		6	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
IC101	Open	7	Normal operation.	
		8	No hazard.	AVR1:0
	Short	1-2	Normal operation.	
		2-3	Normal operation.	
		3-4	Normal operation.	
		5-6	Normal operation.	
		6-7	Normal operation.	
		7-8	Normal operation.	
IC111	Open	1	Normal operation.	
		2	Normal operation.	
		3	No hazard.	AVR1:0
		4	No hazard.	AVR1:0
		5	No hazard.	AVR1:0
		6	See 20 Page.	
		7	See 20 Page.	
		8	No hazard.	AVR1:0
	Short	1-2	Normal operation.	
		2-3	No hazard.	AVR1:0
		3-4	Normal operation.	
		5-6	No hazard.	AVR1:0
		6-7	Normal operation.	
		7-8	Normal operation.	
IC121	Open	1	No hazard.	AVR1:0
		2	No hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
IC121	Open	3	See 20 Page.	
		4	No hazard.	AVR1:0
		5	See 20 Page.	
		6	No hazard.	AVR1:0
		7	No hazard.	AVR1:0
		8	No hazard.	AVR1:0
	Short	1-2	See 20 Page.	
		2-3	No hazard.	AVR1:0
		3-4	No hazard.	AVR1:0
		5-6	See 20 Page.	
		6-7	No hazard.	AVR1:0
		7-8	No hazard.	AVR1:0
IC131	Open	1	No hazard.	AVR1:0
		2	No hazard.	AVR1:0
		3	See 20 Page.	
		4	No hazard.	AVR1:0
		5	See 20 Page.	
		6	No hazard.	AVR1:0
		7	No hazard.	AVR1:0
		8	No hazard.	AVR1:0
	Short	1-2	See 20 Page.	
		2-3	No hazard.	AVR1:0
		3-4	No hazard.	AVR1:0
		5-6	See 20 Page.	

F M E A

Component	Mode		Comment	Output Voltage (V)
IC131	Short	6-7	No hazard.	AVR1:0
		7-8	No hazard.	AVR1:0
IC301	Open	1	No hazard.	AVR1:0
		2	No hazard.	AVR1:0
		3	Normal operation.	
		4	No hazard.	AVR1:0
		5	No hazard.	AVR1:0
		6	Normal operation.	
		7	Normal operation.	
		8	Normal operation.	
		9	No hazard.	AVR1:0
		10	No hazard.	AVR1:0
		11	Normal operation.	
		12	Normal operation.	
		13	Normal operation.	
		14	Normal operation.	
		15	No hazard.	AVR1:0
		16	See 20 Page.	
		17	No hazard.	AVR1:0
		18	See 20 Page.	
		19	No hazard.	AVR1:0
		20	Normal operation.	
		21	Normal operation.	
		22	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
IC301	Open	23	Normal operation.	
		24	Normal operation.	
		25	See 20 Page.	
		26	No hazard.	AVR1:0
		27	No hazard.	AVR1:0
		28	No hazard.	AVR1:0
		29	No hazard.	AVR1:0
		30	Normal operation.	
		31	Output voltage increased. No hazard.	AVR1:Increased
		32	Output voltage increased. No hazard.	AVR1:Increased
		33	Output voltage increased. No hazard.	AVR1:Increased
		34	Output voltage decreased. No hazard.	AVR1:decreased
		35	No hazard.	AVR1:0
		36	No hazard.	AVR1:0
		37	No hazard.	AVR1:0
		38	No hazard.	AVR1:0
		39	No hazard.	AVR1:0
		40	Output voltage increased. No hazard.	AVR1:Increased
	Short	1-2	No hazard.	AVR1:0
		2-3	No hazard.	AVR1:0
		3-4	No hazard.	AVR1:0
		4-5	No hazard.	AVR1:0
		5-6	Normal operation.	
		6-7	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
IC301	Short	7-8	Normal operation.	
		8-9	No hazard.	AVR1:0
		9-10	No hazard.	AVR1:0
		10-11	Normal operation.	
		11-12	Normal operation.	
		12-13	Normal operation.	
		13-14	Normal operation.	
		14-15	Normal operation.	
		15-16	No hazard.	AVR1:0
		16-17	No hazard.	AVR1:0
		17-18	No hazard.	AVR1:0
		18-19	No hazard.	AVR1:0
		19-20	Normal operation.	
		20-21	Normal operation.	
		21-22	Normal operation.	
		22-23	Normal operation.	
		23-24	Normal operation.	
		24-25	Normal operation.	
		25-26	No hazard.	AVR1:0
		26-27	No hazard.	AVR1:0
		27-28	No hazard.	AVR1:0
		28-29	No hazard.	AVR1:0
		29-30	Normal operation.	
		30-31	Normal operation.	

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Component	Mode		Comment	Output Voltage (V)
IC301	Short	31-32	No hazard.	AVR1:0
		32-33	Output voltage decreased. No hazard.	AVR1:decreased
		33-34	Output voltage increased. No hazard.	AVR1:Increased
		34-35	Output voltage decreased or increased.	AVR1:decreased or increased
		35-36	Normal operation.	
		36-37	No hazard.	AVR1:0
		37-38	Output voltage decreased No hazard.	AVR1:decreased
		38-39	Output voltage decreased No hazard.	AVR1:decreased
		39-40	No hazard.	AVR1:0
		40-1	No hazard.	AVR1:0
IC401	Open	1	Normal operation.	
		2	No hazard.	AVR1:0
		3	No hazard.	AVR1:0
		4	Normal operation.	
		5	No hazard.	AVR1:0
		6	No hazard.	AVR1:0
		7	Normal operation.	
		8	Normal operation.	
	Short	1-2	Normal operation.	
		2-3	Normal operation.	
		3-4	Normal operation.	
		5-6	Normal operation.	
		6-7	Normal operation.	
		7-8	No hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
L141	Open		No hazard.	AVR1:0
	Short		No hazard.	AVR1:0
L151	Open		No hazard.	AVR1:0
	Short		No hazard.	AVR1:0
TH221	Open		Normal operation.	
	Short		No hazard.	AVR1:0
TH231	Open		Normal operation.	
	Short		No hazard.	AVR1:0
TR121	Open	D	See 20 Page.	
		S	See 20 Page.	
		G	See 20 Page.	
	Short	D-S	See 20 Page.	
		S-G	See 20 Page.	
		G-D	See 20 Page.	
TR122	Open	D	External Fuse opened, No hazard.	AVR1:0
		S	External Fuse opened, No hazard.	AVR1:0
		G	External Fuse opened, No hazard.	AVR1:0
	Short	D-S	External Fuse opened, No hazard.	AVR1:0
		S-G	External Fuse opened, No hazard.	AVR1:0
		G-D	External Fuse opened, No hazard.	AVR1:0
TR123	Open	D	External Fuse opened, No hazard.	AVR1:0
		S	External Fuse opened, No hazard.	AVR1:0
		G	External Fuse opened, No hazard.	AVR1:0
	Short	D-S	External Fuse opened, No hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
TR123	Short	S-G	External Fuse opened, No hazard.	AVR1:0
		G-D	External Fuse opened, No hazard.	AVR1:0
TR131	Open	D	See 20 Page.	
		S	See 21 Page.	
		G	See 21 Page.	
	Short	D-S	See 21 Page.	
		S-G	See 21 Page.	
		G-D	See 21 Page.	
TR132	Open	D	External Fuse opened, No hazard.	AVR1:0
		S	External Fuse opened, No hazard.	AVR1:0
		G	External Fuse opened, No hazard.	AVR1:0
	Short	D-S	External Fuse opened, No hazard.	AVR1:0
		S-G	External Fuse opened, No hazard.	AVR1:0
		G-D	External Fuse opened, No hazard.	AVR1:0
TR133	Open	D	External Fuse opened, No hazard.	AVR1:0
		S	External Fuse opened, No hazard.	AVR1:0
		G	External Fuse opened, No hazard.	AVR1:0
	Short	D-S	External Fuse opened, No hazard.	AVR1:0
		S-G	External Fuse opened, No hazard.	AVR1:0
		G-D	External Fuse opened, No hazard.	AVR1:0
TR201	Open	D	Normal operation.	
		S	Normal operation.	
		G	Normal operation.	
	Short	D-S	Normal operation.	

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Component	Mode		Comment	Output Voltage (V)
TR201	Short	S-G	Normal operation.	
		G-D	Normal operation.	
TR202	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	Normal operation.	
		E-B	Normal operation.	
		B-C	No hazard.	AVR1:0
TR203	Open	C	No hazard.	AVR1:0
		E	No hazard.	AVR1:0
		B	No hazard.	AVR1:0
	Short	C-E	Normal operation.	
		E-B	No hazard.	AVR1:0
		B-C	Normal operation.	
TR301	Open	C(3)	Normal operation.	
		E(4)	Output voltage decreased No hazard.	AVR1:decreased
		B(5)	Output voltage decreased No hazard.	AVR1:decreased
		C(6)	Normal operation.	
		E(1)	Normal operation.	
		B(2)	Normal operation.	
	Short	E(1)-B(2)	Normal operation.	
		B(2)-C(3)	Normal operation.	
		E(4)-B(5)	Normal operation.	
		B(5)-C(6)	Output voltage increased. No hazard.	AVR1:Increased

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Component	Mode		Comment	Output Voltage (V)
TR401	Open	D	Normal operation.	
		S	Normal operation.	
		G	Normal operation.	
	Short	D-S	Normal operation.	
		S-G	Normal operation.	
		G-D	Normal operation.	
TR501	Open	D	Normal operation.	
		S	Normal operation.	
		G	Normal operation.	
	Short	D-S	Normal operation.	
		S-G	Normal operation.	
		G-D	Normal operation.	
ZD201	Open		Normal operation.	
	Short		No hazard.	AVR1:0
ZD301	Open		Normal operation.	
	Short		Output voltage increased. No hazard.	AVR1:Increased
R101	Open		Normal operation.	
R111	Open		Normal operation.	
R121	Open		No hazard.	AVR1:0
R122	Open		Normal operation.	
R123	Open		Normal operation.	
R124	Open		Normal operation.	
R125	Open		Normal operation.	
R131	Open		No hazard.	AVR1:0

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Component	Mode	Comment	Output Voltage (V)
R132	Open	Normal operation.	
R133	Open	Normal operation.	
R134	Open	Normal operation.	
R135	Open	Normal operation.	
R141	Open	Normal operation.	
R201	Open	No hazard.	AVR1:0
R202	Open	Normal operation.	
R203	Open	Normal operation.	
R204	Open	Normal operation.	
R205	Open	Normal operation.	
R206	Open	No hazard.	AVR1:0
R207	Open	No hazard.	AVR1:0
R208	Open	No hazard.	AVR1:0
R209	Open	Normal operation.	
R210	Open	No hazard.	AVR1:0
R211	Open	No hazard.	AVR1:0
R212	Open	Normal operation.	
R213	Open	No hazard.	AVR1:0
R214	Open	Normal operation.	
R215	Open	No hazard.	AVR1:0
R217	Open	No hazard.	AVR1:0
R218	Open	No hazard.	AVR1:0
R219	Open	No hazard.	AVR1:0
R301	Open	No hazard.	AVR1:0

F M E A

Component	Mode	Comment	Output Voltage (V)
R302	Open	Normal operation.	
R303	Open	No hazard.	AVR1:0
R304	Open	Output voltage increased. No hazard.	AVR1:Increased
R305	Open	Output voltage decreased No hazard.	AVR1:decreased
R306	Open	Output voltage decreased No hazard.	AVR1:decreased
R307	Open	Output voltage increased. No hazard.	AVR1:Increased
R308	Open	Output voltage increased. No hazard.	AVR1:Increased
R309	Open	No hazard.	AVR1:0
R310	Open	No hazard.	AVR1:0
R311	Open	Output voltage decreased No hazard.	AVR1:decreased
R312	Open	Output voltage increased. No hazard.	AVR1:Increased
R313	Open	Normal operation.	
R314	Open	Output voltage decreased No hazard.	AVR1:decreased
R315	Open	Normal operation.	
R401	Open	Normal operation.	
R402	Open	Normal operation.	
R403	Open	Normal operation.	
R404	Open	Normal operation.	
R405	Open	Normal operation.	
R406	Open	Normal operation.	
R407	Open	Normal operation.	
R408	Open	No hazard.	AVR1:0
R409	Open	Normal operation.	
R410	Open	Normal operation.	

F M E A

Component	Mode	Comment	Output Voltage (V)
R411	Open	Normal operation.	
R412	Open	No hazard.	AVR1:0
R413	Open	Normal operation.	
R501	Open	Normal operation.	
R502	Open	Normal operation.	
R503	Open	Normal operation.	
R504	Open	Normal operation.	
R505	Open	Normal operation.	
R506	Open	Normal operation.	
R507	Open	Normal operation.	
R508	Open	No hazard.	AVR1:0
R509	Open	Normal operation.	
R510	Open	Normal operation.	
R511	Open	Normal operation.	
R512	Open	No hazard.	AVR1:0
R513	Open	Normal operation.	

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
C141	Short		No hazard.	AVR1:0
C307	Open		No hazard.	AVR1:0
C402	Short		No hazard.	AVR1:0
C502	Short		No hazard.	AVR1:0
IC111	Open	6	No hazard.	AVR1:0
		7	No hazard.	AVR1:0
IC121	Open	3	No hazard.	AVR1:0
		5	No hazard.	AVR1:0
	Short	1-2	External Fuse opened, No hazard.	AVR1:0
		5-6	No hazard.	AVR1:0
IC131	Open	3	No hazard.	AVR1:0
		5	No hazard.	AVR1:0
	Short	1-2	External Fuse opened, No hazard.	AVR1:0
		5-6	No hazard.	AVR1:0
IC301	Open	16	External Fuse opened, No hazard.	AVR1:0
		18	External Fuse opened, No hazard.	AVR1:0
		25	No hazard.	AVR1:0
TR121	Open	D	No hazard.	AVR1:0
		S	No hazard.	AVR1:0
		G	No hazard.	AVR1:0
	Short	D-S	Output voltage increased. No hazard.	AVR1:Increased
		S-G	No hazard.	AVR1:0
		G-D	Output voltage increased. No hazard.	AVR1:Increased
TR131	Open	D	No hazard.	AVR1:0



ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
TR131	Open	S	No hazard.	AVR1:0
		G	No hazard.	AVR1:0
	Short	D-S	Output voltage increased. No hazard.	AVR1:Increased
		S-G	No hazard.	AVR1:0
		G-D	Output voltage increased. No hazard.	AVR1:Increased