

## ABNORMAL TEST RESULT

## OF MODEL BRDS100

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 : 2/23 ~ 22/23)

( Abnormal Test Result: 23/23 ~ 23/23)

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.	AVR1:0
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
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
C124	Open	Normal operation.	
	Short	Output voltage increased. No hazard.	AVR1:Increased



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
C134	Open	Normal operation.	
	Short	Output voltage increased. No hazard.	AVR1:Increased
C141	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C142	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
C201	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C202	Open	Normal operation.	
	Short	Normal operation.	
C203	Open	Normal operation.	
	Short	Normal operation.	
C205	Open	Normal operation.	
	Short	Normal operation.	



F M E A

Component	Mode	Comment	Output Voltage (V)
C206	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C207	Open	Normal operation.	
	Short	No hazard.	AVR1:0
C208	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	No Hazard.	AVR1:0
	Short	No hazard.	AVR1:0
C308	Open	Normal operation.	
	Short	Normal operation.	
C309	Open	Normal operation.	
	Short	No hazard.	AVR1:0



F M E A

Component	Mode	Comment	Output Voltage (V)
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	No Hazard.	AVR1:0
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.	
C407	Open	Normal operation.	
	Short	Normal operation.	



F M E A

Component	Mode	Comment	Output Voltage (V)	
C501	Open	Normal operation.		
	Short	No hazard.	AVR1:0	
C502	Open	Normal operation.		
	Short	No Hazard.	AVR1:0	
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.		
C601	Open	Normal operation.		
	Short	Output voltage decreased. No hazard.	AVR1:decreased	
C602	Open	Normal operation.		
	Short	Output voltage decreased. No hazard.	AVR1:decreased	
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



F M E A

Component	Mode		Comment	Output Voltage (V)	
IC101	Open	5	Normal operation.		
		6	Normal operation.		
		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			No Hazard.	AVR1:0	
7			No Hazard.	AVR1:0	
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.				



F M E A

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





F M E A

Component	Mode		Comment	Output Voltage (V)
IC131	Short	3-4	No hazard.	AVR1:0
		5-6	No Hazard.	AVR1:0
		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	No Hazard.	
		17	No hazard.	AVR1:0
		18	No Hazard.	
		19	No hazard.	AVR1:0
		20	Normal operation.	



F M E A

Component	Mode		Comment	Output Voltage (V)
IC301	Open	21	Normal operation.	
		22	Normal operation.	
		23	Normal operation.	
		24	Normal operation.	
		25	No Hazard.	AVR1:0
		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



F M E A

Component	Mode		Comment	Output Voltage (V)
IC301	Short	5-6	Normal operation.	
		6-7	Normal operation.	
		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.	
		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.	



F M E A

Component	Mode		Comment	Output Voltage (V)
IC301	Short	30-31	Normal operation.	
		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
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		



F M E A

Component	Mode		Comment	Output Voltage (V)
IC601	Open	1	Output voltage decreased. No hazard.	AVR1:decreased
		2	Output voltage decreased. No hazard.	AVR1:decreased
		3	Output voltage decreased. No hazard.	AVR1:decreased
IC602	Open	1		
		2		
		3		
		4		
		5		
		6		
	Short	1-2		
		2-3		
		3-4		
		4-5	AVR1:decreased	
		5-6		
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
R101	Open		Normal operation.	
R102	Open		Normal operation.	



F M E A

Component	Mode	Comment	Output Voltage (V)
R103	Open	Normal operation.	
R111	Open	Normal operation.	
R112	Open	No hazard.	AVR1:0
R121	Open	No hazard.	AVR1:0
R122	Open	Normal operation.	
R123	Open	Normal operation.	
R124	Open	Normal operation.	
R125	Open	Normal operation.	
R126	Open	Normal operation.	
R127	Open	Normal operation.	
R128	Open	Normal operation.	
R131	Open	No hazard.	AVR1:0
R132	Open	Normal operation.	
R133	Open	Normal operation.	
R134	Open	Normal operation.	
R135	Open	Normal operation.	
R136	Open	Normal operation.	
R137	Open	Normal operation.	
R138	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.	



F M E A

Component	Mode	Comment	Output Voltage (V)
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
R220	Open	No hazard.	AVR1:0
R301	Open	No hazard.	AVR1:0
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



F M E A

Component	Mode	Comment	Output Voltage (V)
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.	
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.	





F M E A

Component	Mode	Comment	Output Voltage (V)
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.	
R601	Open	Output voltage decreased. No hazard.	AVR1:decreased
R602	Open	Output voltage increased. No hazard.	AVR1:Increased
TR121	Open	D	See 23 Page.
		S	See 23 Page.
		G	See 23 Page.
	Short	D-S	See 23 Page.
		S-G	See 23 Page.
		G-D	See 23 Page.
TR122	Open	D	
		S	
		G	
	Short	D-S	
		S-G	
		G-D	
TR123	Open	D	
		S	



F M E A

Component	Mode		Comment	Output Voltage (V)
TR123	Open	G		
	Short	D-S		
		S-G		
		G-D		
TR124	Open	D		
		S		
		G		
	Short	D-S		
		S-G		
		G-D		
TR131	Open	D	See 23 Page.	
		S	See 23 Page.	
		G	See 23 Page.	
	Short	D-S	See 23 Page.	
		S-G	See 23 Page.	
		G-D	See 23 Page.	
TR132	Open	D		
		S		
		G		
	Short	D-S		
		S-G		
		G-D		
TR133	Open	D		
		S		



F M E A

Component	Mode		Comment	Output Voltage (V)
TR133	Open	G		
	Short	D-S		
		S-G		
		G-D		
TR134	Open	D		
		S		
		G		
	Short	D-S		
		S-G		
		G-D		
TR201	Open	D	Normal operation.	
		S	Normal operation.	
		G	Normal operation.	
	Short	D-S	Normal operation.	
		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



F M E A

Component	Mode		Comment	Output Voltage (V)
TR203	Open	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
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.	



F M E A

Component	Mode		Comment	Output Voltage (V)
TR501	Short	S-G	Normal operation.	
		G-D	Normal operation.	
TR601	Open	D	Output voltage increased. No hazard.	AVR1: Increased
		S	Output voltage increased. No hazard.	AVR1: Increased
		G	Output voltage increased. No hazard.	AVR1: Increased
	Short	D-S		
		S-G	Output voltage increased. No hazard.	AVR1: Increased
		G-D	Output voltage increased. No hazard.	AVR1: Increased
ZD201	Open		Normal operation.	
	Short		No hazard.	AVR1: 0
ZD301	Open		Normal operation.	
	Short		Output voltage increased. No hazard.	AVR1: Increased
ZD601	Open	1	Normal operation.	
		2	Normal operation.	
		3	Normal operation.	
	Short	1-2	Normal operation.	AVR1: Increased
		2-3	Normal operation.	
		1-3	Normal operation.	AVR1: Increased
ZD602	Open		Normal operation.	
	Short		Normal operation.	
ZD603	Open	1	Normal operation.	
		2	Normal operation.	
		3	Normal operation.	
	Short	1-2	Normal operation.	AVR1: Increased



F M E A

Component	Mode		Comment	Output Voltage (V)
ZD603	Short	2-3	Normal operation.	
		1-3	Normal operation.	AVR1:Increased



ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
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
		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