



ABNORMAL TEST RESULT

OF MODEL WBA350B

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 : 2/20 ~ 18/20)

(Abnormal Test Result: 19/20 ~ 20/20)

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.	AVR1:*
	Short	Fuse opened, No hazard.	AVR1:0
C102	Open	Normal operation.	AVR1:*
	Short	Fuse opened, No hazard.	AVR1:0
C104	Open	Normal operation.	AVR1:*
	Short	C105 opened, No hazard.	AVR1:decreased
C105	Open	Normal operation.	AVR1:*
	Short	C104 opened, No hazard.	AVR1:decreased
C106	Open	Normal operation.	AVR1:*
	Short	Fuse opened, No hazard.	AVR1:0
C111	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C112	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C113	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C114	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C211	Open	Normal operation.	AVR1:*
	Short	See page 19.	
C221	Open	Normal operation.	AVR1:*
	Short	See page 19.	
C231	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:0

F M E A

Component	Mode	Comment	Output Voltage (V)
C232	Open	No hazard.	AVR1:0
	Short	No hazard.	AVR1:0
C301	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:decreased
C303	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:decreased
C304	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C305	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:decreased
C306	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:0
C308	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C309	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:0
C310	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:0
C311	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:0
C312	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:decreased
C313	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:decreased

F M E A

Component	Mode	Comment	Output Voltage (V)
C314	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:decreased
C501	Open	Normal operation.	AVR1:*
	Short	See page 19.	
C502 (Except:-48)	Open	Normal operation.	AVR1:*
	Short	See page 19.	
C511	Open	Normal operation.	AVR1:*
	Short	See page 19.	
C512	Open	Normal operation.	AVR1:*
	Short	See page 19.	
C513	Open	Normal operation.	AVR1:*
	Short	See page 19.	
C514	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:decreased
C520 (Only -12)	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:decreased
C521	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:decreased
C522 (Except:-36, -48)	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:decreased
C523	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:decreased
C524	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:decreased

F M E A

Component	Mode	Comment	Output Voltage (V)
C531	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C532	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
C611	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:0
C614	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:decreased
C703	Open	Normal operation.	AVR1:*
	Short	See page 19.	
C704	Open	Normal operation.	AVR1:*
	Short	See page 19.	
C722	Open	Normal operation.	AVR1:*
	Short	See page 19.	
D211	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D212	Open	Normal operation.	AVR1:*
	Short	See page 19.	
D221	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D222	Open	Normal operation.	AVR1:*
	Short	See page 19.	
D230	Open	Normal operation.	AVR1:*
	Short	No hazard.	AVR1:0



F M E A

Component	Mode		Comment	Output Voltage (V)
D301	Open		No hazard.	AVR1:decreased
	Short		No hazard.	AVR1:decreased
D302	Open		No hazard.	AVR1:decreased
	Short		No hazard.	AVR1:decreased
D303	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
D511	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
D601	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
D701	Open		See page 19.	
	Short		No hazard.	AVR1:decreased
D702	Open		See page 19.	
	Short		No hazard.	AVR1:decreased
D721	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
FAN701	Open	1	See page 19.	
		2	See page 19.	
	Short	1-2	See page 19.	
IC301	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

F M E A

Component	Mode		Comment	Output Voltage (V)
IC301	Open	6	No hazard.	AVR1:0
		7	No hazard.	AVR1:0
		8	Normal operation.	AVR1:*
	Short	1-2	Normal operation.	AVR1:*
		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	Normal operation.	AVR1:*
IC601	Open	1	Normal operation.	AVR1:*
		2	Normal operation.	AVR1:*
		3	No hazard.	AVR1:0
		4	No hazard.	AVR1:0
		5	No hazard.	AVR1:0
	Short	1-2	Normal operation.	AVR1:*
		2-3	No hazard.	AVR1:0
		4-5	No hazard.	AVR1:0
IC721	Open	1	Normal operation.	AVR1:*
		2	Normal operation.	AVR1:*
		3	See page 19.	
		4	See page 19.	
		5	See page 19.	
	Short	1-2	Normal operation.	AVR1:*
		2-3	Normal operation.	AVR1:*

F M E A

Component	Mode		Comment	Output Voltage (V)
IC721	Short	4-5	See page 19.	
L101	Open	1	No hazard.	AVR1:0
		2	No hazard.	AVR1:0
		3	No hazard.	AVR1:0
		4	No hazard.	AVR1:0
	Short	1-2	Normal operation.	AVR1:*
		2-3	Fuse opened, No hazard.	AVR1:0
		3-4	Normal operation.	AVR1:*
L102	Open	1	No hazard.	AVR1:0
		2	No hazard.	AVR1:0
		3	No hazard.	AVR1:0
		4	No hazard.	AVR1:0
	Short	1-2	Normal operation.	AVR1:*
		2-3	Fuse opened, No hazard.	AVR1:0
		3-4	Normal operation.	AVR1:*
L501	Open		No hazard.	AVR1:0
	Short		No hazard.	AVR1:decreased
L701	Open		See page 19.	
	Short		See page 19.	
LED601	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
PC301	Open	A, K	No hazard.	AVR1:0
		C, E	No hazard.	AVR1:0
	Short	A-K	No hazard.	AVR1:0

F M E A

Component	Mode		Comment	Output Voltage (V)
PC301	Short	C-E	No hazard.	AVR1:0
PC302	Open	A, K	Normal operation.	AVR1:*
		C, E	Normal operation.	AVR1:*
	Short	A-K	Normal operation.	AVR1:*
		C-E	No hazard.	AVR1:0
R101	Open		Normal operation.	AVR1:*
R102	Open		Normal operation.	AVR1:*
R103	Open		Normal operation.	AVR1:*
R104	Open		Normal operation.	AVR1:*
R105	Open		Normal operation.	AVR1:*
R111	Open		Normal operation.	AVR1:*
R112	Open		Normal operation.	AVR1:*
R113	Open		Normal operation.	AVR1:*
R114	Open		Normal operation.	AVR1:*
R115	Open		Normal operation.	AVR1:*
R116	Open		Normal operation.	AVR1:*
R201	Open		No hazard.	AVR1:0
R202	Open		No hazard.	AVR1:0
R212	Open		Normal operation.	AVR1:*
R213	Open		Normal operation.	AVR1:*
R214	Open		Normal operation.	AVR1:*
R215	Open		Normal operation.	AVR1:*
R216	Open		No hazard.	AVR1:0
R222	Open		Normal operation.	AVR1:*



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Component	Mode	Comment	Output Voltage (V)
R223	Open	Normal operation.	AVR1:*
R224	Open	Normal operation.	AVR1:*
R225	Open	Normal operation.	AVR1:*
R226	Open	No hazard.	AVR1:0
R231	Open	No hazard.	AVR1:decreased
R232	Open	No hazard.	AVR1:decreased
R233	Open	No hazard.	AVR1:decreased
R234	Open	No hazard.	AVR1:0
R301	Open	Normal operation.	AVR1:*
R302	Open	Normal operation.	AVR1:*
R303	Open	Normal operation.	AVR1:*
R304	Open	No hazard.	AVR1:decreased
R306	Open	Normal operation.	AVR1:*
R307	Open	Normal operation.	AVR1:*
R308	Open	Normal operation.	AVR1:*
R310	Open	Normal operation.	AVR1:*
R311	Open	No hazard.	AVR1:0
R312	Open	Normal operation.	AVR1:*
R313	Open	Normal operation.	AVR1:*
R314	Open	Normal operation.	AVR1:*
R316	Open	Normal operation.	AVR1:*
R351	Open	Normal operation.	AVR1:*
R352	Open	Normal operation.	AVR1:*
R353	Open	Normal operation.	AVR1:*

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Component	Mode	Comment	Output Voltage (V)
R354	Open	Normal operation.	AVR1:*
R355	Open	Normal operation.	AVR1:*
R356	Open	Normal operation.	AVR1:*
R357	Open	Normal operation.	AVR1:*
R358	Open	Normal operation.	AVR1:*
R359	Open	Normal operation.	AVR1:*
R360	Open	Normal operation.	AVR1:*
R361	Open	No hazard.	AVR1:0
R362	Open	No hazard.	AVR1:0
R363	Open	No hazard.	AVR1:0
R364	Open	No hazard.	AVR1:0
R365	Open	No hazard.	AVR1:0
R501	Open	Normal operation.	AVR1:*
R502 (Except:-48)	Open	Normal operation.	AVR1:*
R503	Open	Normal operation.	AVR1:*
R504 (Except:-48)	Open	Normal operation.	AVR1:*
R511	Open	Normal operation.	AVR1:*
R512	Open	Normal operation.	AVR1:*
R513	Open	Normal operation.	AVR1:*
R514	Open	Normal operation.	AVR1:*
R515	Open	Normal operation.	AVR1:*
R516	Open	Normal operation.	AVR1:*
R517	Open	Normal operation.	AVR1:*
R518	Open	Normal operation.	AVR1:*

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Component	Mode		Comment	Output Voltage (V)
R601	Open		Normal operation.	AVR1:*
R603 (Except: -12, -24)	Open		Normal operation.	AVR1:*
R611	Open		No hazard.	AVR1:0
R612	Open		Normal operation.	AVR1:*
R613	Open		No hazard.	AVR1:decreased
R615	Open		No hazard.	AVR1:0
R621	Open		Normal operation.	AVR1:*
R622	Open		No hazard.	AVR1:0
R623	Open		Normal operation.	AVR1:*
R625 (Except: -12, -24)	Open		Normal operation.	AVR1:*
R631	Open		Normal operation.	AVR1:*
R633	Open		Normal operation.	AVR1:*
R703	Open		See page 19.	
R721	Open		See page 20.	
R722	Open		Normal operation.	AVR1:*
R723	Open		No hazard.	AVR1:0
R724	Open		See page 20.	
R725	Open		Normal operation.	AVR1:*
R726	Open		Normal operation.	AVR1:*
R727	Open		Normal operation.	AVR1:*
R728	Open		Normal operation.	AVR1:*
SCR301	Open	A	Normal operation.	AVR1:*
		K	Normal operation.	AVR1:*
		G	Normal operation.	AVR1:*

F M E A

Component	Mode		Comment	Output Voltage (V)
SCR301	Short	A-K	No hazard.	AVR1:0
		A-G	No hazard.	AVR1:0
		K-G	Normal operation.	AVR1:*
SS101	Open	1	No hazard.	AVR1:0
		2	No hazard.	AVR1:0
		3	No hazard.	AVR1:0
		4	No hazard.	AVR1:0
	Short	1-2	Fuse opened, No hazard.	AVR1:0
		2-3	Fuse opened, No hazard.	AVR1:0
		3-4	Fuse opened, No hazard.	AVR1:0
SS501 (Except:-48)	Open		See page 20.	
	Short		See page 20.	
SS502	Open		See page 20.	
	Short		See page 20.	
SS503	Open		See page 20.	
	Short		See page 20.	
SS504 (Except:-48)	Open		See page 20.	
	Short		See page 20.	
T201	Open	1	No hazard.	AVR1:0
		2	No hazard.	AVR1:0
		4	No hazard.	AVR1:0
		6	No hazard.	AVR1:0
		7	Normal operation.	AVR1:*
		8	Normal operation.	AVR1:*



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Component	Mode		Comment	Output Voltage (V)
T201	Open	9	Normal operation.	AVR1:*
		10	Normal operation.	AVR1:*
		11	No hazard.	AVR1:0
		12	No hazard.	AVR1:0
	Short	1-2	No hazard.	AVR1:0
		4-6	See page 20.	
		7-8	Normal operation.	AVR1:*
		8-9	No hazard.	AVR1:0
		9-10	Normal operation.	AVR1:*
		10-11	No hazard.	AVR1:0
		11-12	No hazard.	AVR1:0
T202	Open	1	No hazard.	AVR1:0
		3	No hazard.	AVR1:0
		5	No hazard.	AVR1:0
		6	No hazard.	AVR1:0
		8	No hazard.	AVR1:0
		10	No hazard.	AVR1:0
	Short	1-3	No hazard.	AVR1:0
		3-6	No hazard.	AVR1:0
		6-8	No hazard.	AVR1:0
		8-10	No hazard.	AVR1:0
TH101	Open		No hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
TH102	Open		No hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
TH102	Short		Normal operation.	AVR1:*
TH721	Open		See page 20.	
	Short		No hazard.	AVR1:0
TR201	Open	D	No hazard.	AVR1:0
		S	No hazard.	AVR1:0
		G	No hazard.	AVR1:0
	Short	D-S	See page 20.	
		S-G	No hazard.	AVR1:0
		G-D	See page 20.	
TR202	Open	D	No hazard.	AVR1:0
		S	No hazard.	AVR1:0
		G	No hazard.	AVR1:0
	Short	D-S	See page 20.	
		S-G	No hazard.	AVR1:0
		G-D	See page 20.	
TR211	Open	C	No hazard.	AVR1:0
		E	No hazard.	AVR1:0
		B	No hazard.	AVR1:0
	Short	C-E	No hazard.	AVR1:0
		E-B	No hazard.	AVR1:0
		B-C	No hazard.	AVR1:0
TR222	Open	C	No hazard.	AVR1:0
		E	No hazard.	AVR1:0
		B	No hazard.	AVR1:0

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Component	Mode		Comment	Output Voltage (V)
TR222	Short	C-E	No hazard.	AVR1:0
		E-B	No hazard.	AVR1:0
		B-C	No hazard.	AVR1:0
TR301	Open	C	No hazard.	AVR1:decreased
		E	No hazard.	AVR1:decreased
		B	No hazard.	AVR1:decreased
	Short	C-E	No hazard.	AVR1:0
		E-B	Normal operation.	AVR1:*
		B-C	No hazard.	AVR1:0
TR302	Open	D	Normal operation.	AVR1:*
		S	Normal operation.	AVR1:*
		G	Normal operation.	AVR1:*
	Short	D-S	Normal operation.	AVR1:*
		S-G	Normal operation.	AVR1:*
		G-D	Normal operation.	AVR1:*
TR351	Open	D	Normal operation.	AVR1:*
		S	Normal operation.	AVR1:*
		G	Normal operation.	AVR1:*
	Short	D-S	Normal operation.	AVR1:*
		S-G	Normal operation.	AVR1:*
		G-D	Normal operation.	AVR1:*
TR701	Open	C	See page 20.	
		E	See page 20.	
		B	See page 20.	

F M E A

Component	Mode		Comment	Output Voltage (V)
TR701	Short	C-E	No hazard.	AVR1:0
		E-B	Normal operation.	AVR1:*
		B-C	No hazard.	AVR1:0
TR721	Open	C	See page 20.	
		E	See page 20.	
		B	See page 20.	
	Short	C-E	Normal operation.	AVR1:*
		E-B	See page 20.	
		B-C	Normal operation.	AVR1:*
VR601	Open	brush	No hazard.	AVR1:decreased
			No hazard.	AVR1:0
	Short		No hazard.	AVR1:0
ZD301	Open		No hazard.	AVR1:0
	Short		No hazard.	AVR1:decreased
ZD352	Open		Normal operation.	AVR1:*
	Short		Normal operation.	AVR1:*
ZD601 (Except:12)	Open		No hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
ZD602 (Except:12)	Open		Normal operation.	AVR1:*
	Short		No hazard.	AVR1:0
ZD603	Open		Normal operation.	AVR1:*
	Short		No hazard.	AVR1:0
ZD604	Open		Normal operation.	AVR1:*
	Short		No hazard.	AVR1:0



F M E A

Component	Mode	Comment	Output Voltage (V)
ZD701	Open	No hazard.	AVR1:0
	Short	See page 20.	



ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
C211	Short		Fuse opened, No hazard.	AVR1:0
C221	Short		Fuse opened, No hazard.	AVR1:0
C501	Short		No hazard.	AVR1:decreased
C502	Short		No hazard.	AVR1:decreased
C511	Short		No hazard.	AVR1:decreased
C512	Short		No hazard.	AVR1:decreased
C513	Short		No hazard.	AVR1:decreased
C703	Short		No hazard.	AVR1:0
C704	Short		No hazard.	AVR1:0
C722	Short		No hazard.	AVR1:0
D212	Short		Fuse opened, No hazard.	AVR1:0
D222	Short		Fuse opened, No hazard.	AVR1:0
D701	Open		No hazard.	AVR1:0
D702	Open		No hazard.	AVR1:0
FAN701	Open	1	No hazard.	AVR1:0
		2	No hazard.	AVR1:0
	Short	1-2	No hazard.	AVR1:0
IC721	Open	3	No hazard.	AVR1:0
		4	No hazard.	AVR1:0
		5	No hazard.	AVR1:0
	Short	4-5	No hazard.	AVR1:0
L701	Open		No hazard.	AVR1:0
	Short		No hazard.	AVR1:0
R703	Open		No hazard.	AVR1:0



ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
R721	Open		No hazard.	AVR1:0
R724	Open		No hazard.	AVR1:0
SS501	Open		No hazard.	AVR1:0
	Short		No hazard.	AVR1:decreased
SS502	Open		No hazard.	AVR1:0
	Short		No hazard.	AVR1:decreased
SS503	Open		No hazard.	AVR1:0
	Short		No hazard.	AVR1:decreased
SS504	Open		No hazard.	AVR1:0
	Short		No hazard.	AVR1:decreased
T201	Short	4-6	Fuse opened, No hazard.	AVR1:0
TH721	Open		No hazard.	AVR1:0
TR201	Short	D-S	Fuse opened, No hazard.	AVR1:0
		G-D	Fuse opened, No hazard.	AVR1:0
TR202	Short	D-S	Fuse opened, No hazard.	AVR1:0
		G-D	Fuse opened, No hazard.	AVR1:0
TR701	Open	C	No hazard.	AVR1:0
		E	No hazard.	AVR1:0
		B	No hazard.	AVR1:0
TR721	Open	C	No hazard.	AVR1:0
		E	No hazard.	AVR1:0
		B	No hazard.	AVR1:0
	Short	E-B	No hazard.	AVR1:0
ZD701	Short		No hazard.	AVR1:0