

ABNORMAL TEST RESULT

OF MODEL PBA150F

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 ~ 18/21)

(Abnormal Test Result: 19/21 ~ 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	F101 opened, No hazard.	AVR1:0
C102	Open	Normal operation.	
	Short	F101 opened, No hazard.	AVR1:0
C103	Open	Normal operation.	
	Short	F101 opened, No hazard.	AVR1:0
C104	Open	Normal operation.	
	Short	F101 opened, No hazard.	AVR1:0
C108	Open	Normal operation.	
	Short	Normal operation.	
C109	Open	See 19 page.	
	Short	See 19 page.	
C110	Open	See 19 page.	
	Short	See 19 page.	
C111	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C112	Open	Normal operation.	
	Short	Normal operation.	
C115	Open	Normal operation.	
	Short	No Hazard.	AVR1:0
C116	Open	Normal operation.	
	Short	Normal operation.	
C118	Open	Normal operation.	
	Short	F101 opened, No hazard.	AVR1:0

F M E A

Component	Mode		Comment	Output Voltage (V)
C119	Open		Normal operation.	
	Short		F101 opened, No hazard.	AVR1:0
C121	Open	ONLY-24, -36, -48	Normal operation.	
	Short	ONLY-24, -36, -48	Normal operation.	
C122	Open	ONLY-24, -36, -48	Normal operation.	
	Short	ONLY-24, -36, -48	Normal operation.	
C129	Open		Normal operation.	
	Short		Normal operation.	
C201	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
C202	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
C203	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
C204	Open		No Hazard.	AVR1:0
	Short		No Hazard.	AVR1:0
C205	Open		Normal operation.	
	Short		Normal operation.	
C206	Open		Output voltage decreased. No hazard.	AVR1:decreased
	Short		Normal operation.	
C207	Open		Output voltage decreased. No hazard.	AVR1:decreased
	Short		Normal operation.	
C208	Open		Normal operation.	
	Short		Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
C209	Open		Normal operation.	
	Short		Normal operation.	
C212	Open	ONLY-3R3, -5	Normal operation.	
	Short	ONLY-3R3, -5	No Hazard.	AVR1:0
C501	Open		Normal operation.	
	Short		Normal operation.	
C502	Open		Normal operation.	
	Short		Normal operation.	
C503	Open		Normal operation.	
	Short		Normal operation.	
C504	Open		Normal operation.	
	Short		Normal operation.	
C505	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
C506	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
C507	Open		Normal operation. (EXCEPT-24, -36, -48)	
	Short		No Hazard. (EXCEPT-24, -36, -48)	AVR1:0
C508	Open		Output voltage decreased.No hazard.	AVR1:decreased
	Short		Output voltage decreased.No hazard.	AVR1:decreased
C512	Open	ONLY-24, -36, -48	Normal operation.	
	Short	ONLY-24, -36, -48	Normal operation.	
C513	Open	ONLY-3R3	Normal operation.	
	Short	ONLY-3R3	Output voltage decreased.No hazard.	AVR1:decreased

F M E A

Component	Mode		Comment	Output Voltage (V)
C514	Open	ONLY-36, -48	Normal operation.	
	Short	ONLY-36, -48	No Hazard.	AVR1:0
C519	Open	ONLY-3R3, -5, -9	Normal operation.	
	Short	ONLY-3R3, -5, -9	No Hazard.	AVR1:0
C551	Open	ONLY-3R3, -5	See 19 page.	
	Short	ONLY-3R3, -5	Normal operation.	
D101	Open		Normal operation.	
	Short		Normal operation.	
D103	Open		See 19 page.	
	Short		See 19 page.	
D104	Open		See 19 page.	
	Short		See 19 page.	
D105	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
D106	Open		See 19 page.	
	Short		See 19 page.	
D107	Open		Normal operation.	
	Short		Normal operation.	
D108	Open		Normal operation.	
	Short		Normal operation.	
D109	Open		Normal operation.	
	Short		Output voltage decreased.No hazard.	AVR1:decreased
D110	Open		Normal operation.	
	Short		Output voltage decreased.No hazard.	AVR1:decreased

F M E A

Component	Mode		Comment	Output Voltage (V)
D201	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
D202	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
D203	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
D204	Open		Normal operation.	
	Short		Output voltage decreased.No hazard.	AVR1:decreased
D205	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
D551	Open	ONLY-3R3, -5	Normal operation.	
	Short	ONLY-3R3, -5	See 19 page.	
IC101	Open	1	No Hazard.	AVR1:0
		2	Normal operation.	
		3	Normal operation.	
		4	Normal operation.	
		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	Normal operation.	
		5-6	No Hazard.	AVR1:0

F M E A

Component	Mode		Comment	Output Voltage (V)
IC101	Short	6-7	No Hazard.	AVR1:0
		7-8	F101 opened, No hazard.	AVR1:0
IC201	Open	1	No Hazard.	AVR1:0
		2	No Hazard.	AVR1:0
		3	F101 opened, No hazard.	AVR1:0
		4	Normal operation.	
		5	Normal operation.	
		6	Normal operation.	
		7	Normal operation.	
		8	Normal operation.	
		9	Normal operation.	
		10	No Hazard.	AVR1:0
		11	No Hazard.	AVR1:0
		12	No Hazard.	AVR1:0
		13	Output voltage decreased. No hazard.	AVR1:decreased
		14	Normal operation.	
		15	Normal operation.	
		16	Normal operation.	
		17	No Hazard.	AVR1:0
		18	Output voltage decreased. No hazard.	AVR1:decreased
		19	Output voltage decreased. No hazard.	AVR1:decreased
		20	No Hazard.	AVR1:0
	Short	1-2	Normal operation.	
		2-3	No Hazard.	AVR1:0

F M E A

Component	Mode		Comment	Output Voltage (V)
IC201	Short	3-4	Normal operation.	
		4-5	Normal operation.	
		5-6	Normal operation.	
		6-7	Normal operation.	
		7-8	Normal operation.	
		8-9	Normal operation.	
		9-10	No Hazard.	AVR1:0
		11-12	No Hazard.	AVR1:0
		12-13	No Hazard.	AVR1:0
		13-14	Normal operation.	
		14-15	Normal operation.	
		15-16	Normal operation.	
		16-17	Normal operation.	
		17-18	Normal operation.	
		18-19	Normal operation.	
		19-20	No Hazard.	AVR1:0
IC501	Open	K	No Hazard.	AVR1:0
		A	No Hazard.	AVR1:0
		R	No Hazard.	AVR1:0
	Short	A-K	Output voltage decreased.No hazard.	AVR1:decreased
		K-R	Output voltage decreased.No hazard.	AVR1:decreased
		R-A	No Hazard.	AVR1:0
J201	Open		No Hazard.	AVR1:0
J501	Open		Normal operation. (ONLY-15, -24, -36, -48)	

F M E A

Component	Mode		Comment	Output Voltage (V)
J502	Open	EXCEPT-36, -48	No Hazard.	AVR1:0
J503	Open		No Hazard.	AVR1:0
J504	Open		No Hazard.	AVR1:0
L101	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
L102	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
L103	Open	6, 11	No Hazard.	AVR1:0
		7, 8	See 19 page.	
		7, 9	No Hazard.	AVR1:0
	Short	6-11	F101 opened, No hazard.	AVR1:0
		7-8	F101 opened, No hazard.	AVR1:0
		7-9	F101 opened, No hazard.	AVR1:0
L104	Open		F101 opened, No hazard.	AVR1:0
	Short		Normal operation.	
L501	Open	EXCEPT-3R3, -5	Normal operation.	
L502	Open	EXCEPT-3R3, -5	Normal operation.	
L503	Open	EXCEPT-3R3, -5	Normal operation.	
L504	Open	EXCEPT-3R3, -5	Normal operation.	
L505	Open	ONLY-9, -12, -15	Normal operation.	
L506	Open	ONLY-9, -12, -15	Normal operation.	
L507	Open		F101 opened, No hazard.	AVR1:0
	Short		No Hazard.	AVR1:0
LED501	Open		Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
LED501	Short		Normal operation.	
PC201	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
PC202	Open	A, K	Normal operation.	
		C, E	Normal operation.	
	Short	A-K	Normal operation.	
		C-E	No Hazard.	AVR1:0
R101	Open		Normal operation.	
R102	Open		Normal operation.	
R103	Open		Normal operation.	
R104	Open		Normal operation.	
R105	Open		Normal operation.	
R106	Open		Output voltage decreased.No hazard.	AVR1:decreased
R107	Open		Normal operation.	
R108	Open		Normal operation.	
R109	Open		Normal operation.	
R110	Open		Normal operation.	
R111	Open		Normal operation.	
R112	Open		Normal operation.	
R113	Open		Normal operation.	
R114	Open		Normal operation.	
R115	Open		Normal operation.	

F M E A

Component	Mode	Comment	Output Voltage (V)
R116	Open	Normal operation.	
R117	Open	See 19 page.	
R119	Open	F101 opened, No hazard.	AVR1:0
R120	Open	Output voltage decreased. No hazard.	AVR1:decreased
R121	Open	Output voltage decreased. No hazard.	AVR1:decreased
R123	Open	Normal operation.	
R124	Open	No Hazard.	AVR1:0
R125	Open	No Hazard.	AVR1:0
R126	Open	No Hazard.	AVR1:0
R127	Open	No Hazard.	AVR1:0
R128	Open	No Hazard.	AVR1:0
R129	Open	No Hazard.	AVR1:0
R130	Open	No Hazard.	AVR1:0
R131	Open	Normal operation.	
R132	Open	Normal operation.	
R133	Open	Normal operation.	
R134	Open	No Hazard.	AVR1:0
R136	Open	Normal operation.	
R137	Open	Normal operation.	
R139	Open	Normal operation.	
R151	Open	Normal operation.	
R152	Open	No Hazard.	AVR1:0
R153	Open	Normal operation.	
R201	Open	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
R202	Open		Normal operation.	
R203	Open		Normal operation.	
R204	Open		Normal operation.	
R205	Open		No Hazard.	AVR1:0
R206	Open		Normal operation.	
R207	Open		No Hazard.	AVR1:0
R208	Open		Output voltage decreased.No hazard.	AVR1:decreased
R209	Open		No Hazard.	AVR1:0
R210	Open		F101 opened, No hazard.	AVR1:0
R211	Open		Normal operation.	
R212	Open		Normal operation.	
R213	Open		Output voltage decreased.No hazard.	AVR1:decreased
R214	Open		Normal operation.	
R215	Open		Normal operation.	
R216	Open		Output voltage decreased.No hazard.	AVR1:decreased
R218	Open		Normal operation.	
R221	Open	ONLY-3R3, -5	Normal operation.	
R501	Open		Normal operation.	
R502	Open		Normal operation.	
R503	Open		No Hazard.	AVR1:0
R504	Open		Normal operation.	
R505	Open		Output voltage decreased.No hazard.	AVR1:decreased
R506	Open		No Hazard.	AVR1:0
R507	Open		Output voltage decreased.No hazard.	AVR1:decreased

F M E A

Component	Mode		Comment	Output Voltage (V)
R508	Open	ONLY-9, -36	No Hazard.	AVR1:0
R509	Open		No Hazard.	AVR1:0
R510	Open		Normal operation.	
R511	Open		Normal operation.	
R512	Open		Normal operation.	
R513	Open		Normal operation.	
R514	Open		Normal operation.	
R515	Open		Normal operation.	
R516	Open	ONLY-36, -48	Normal operation.	
R517	Open		Normal operation.	
R518	Open		Normal operation.	
R521	Open		Normal operation.	
R522	Open		Normal operation.	
R523	Open		Normal operation.	
R524	Open		Normal operation.	
R525	Open		Normal operation.	
R526	Open		Normal operation.	
R527	Open		Normal operation.	
R528	Open		Normal operation.	
R529	Open		Normal operation.	
R530	Open		Normal operation.	
R531	Open	EXCEPT-3R3, -5	Normal operation.	
R532	Open	ONLY-9, -12	Normal operation.	
R533	Open	ONLY-9, -12	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
R534	Open	ONLY-9, -12	Normal operation.	
R535	Open	ONLY-9, -12	Normal operation.	
R551	Open	ONLY-3R3, -5	Normal operation.	
R552	Open	ONLY-3R3, -5	Normal operation.	
R553	Open	ONLY-3R3, -5	Normal operation.	
R554	Open	ONLY-3R3, -5	Normal operation.	
R555	Open	ONLY-3R3, -5	Normal operation.	
R556	Open	ONLY-3R3, -5	Normal operation.	
SK101	Open		Normal operation.	
	Short		F101 opened, No hazard.	AVR1:0
SS101	Open		See 19 page.	
	Short		F101 opened, No hazard.	AVR1:0
SS102	Open		See 19 page.	
	Short		F101 opened, No hazard.	AVR1:0
SS103	Open	Cathode	F101 opened, No hazard.	AVR1:0
		Alternative	See 19 page.	
	Short		F101 opened, No hazard.	AVR1:0
SS501	Open	Cathode	F101 opened, No hazard. (EXCEPT-3R3, -5)	AVR1:0
		Alternative	See 19 page. (EXCEPT-3R3, -5)	
	Short		No Hazard. (EXCEPT-3R3, -5)	AVR1:0
SS502	Open	Cathode	See 19 page. (EXCEPT-3R3, -5)	
		Alternative	See 19 page. (EXCEPT-3R3, -5)	
	Short		No Hazard. (EXCEPT-3R3, -5)	AVR1:0
SS503	Open	Cathode	See 19 page. (ONLY-9, -12, -15)	

F M E A

Component	Mode		Comment	Output Voltage (V)
SS503	Open	Alternative	See 19 page. (ONLY-9, -12, -15)	
	Short		No Hazard. (ONLY-9, -12, -15)	AVR1:0
T201	Open	1, 6	See 19 page.	
		2, 3, 4, 5	F101 opened, No hazard.	AVR1:0
		7, 8	No Hazard.	AVR1:0
		10, 12	No Hazard.	AVR1:0
	Short	1-6	F101 opened, No hazard.	AVR1:0
		2, 3-4, 5	F101 opened, No hazard.	AVR1:0
		7-8	F101 opened, No hazard.	AVR1:0
		10-12	F101 opened, No hazard.	AVR1:0
TH101	Open		No Hazard.	AVR1:0
	Short		Normal operation.	
TR101	Open	D	Normal operation.	
		S	Normal operation.	
		G	Normal operation.	
	Short	D-S	No Hazard.	AVR1:0
		S-G	Normal operation.	
		G-D	No Hazard.	AVR1:0
TR102	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.	

F M E A

Component	Mode		Comment	Output Voltage (V)
TR103	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	Normal operation.	
		E-B	Normal operation.	
		B-C	Normal operation.	
TR104	Open	C	F101 opened, No hazard.	AVR1:0
		E	F101 opened, No hazard.	AVR1:0
		B	F101 opened, No hazard.	AVR1:0
	Short	C-E	No Hazard.	AVR1:0
		E-B	F101 opened, No hazard.	AVR1:0
		B-C	No Hazard.	AVR1:0
TR105	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.	
TR201	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.	

F M E A

Component	Mode		Comment	Output Voltage (V)
TR501	Open	D ONLY-3R3, -5	F101 opened, No hazard.	AVR1:0
		S	F101 opened, No hazard.	AVR1:0
		G ONLY-3R3, -5	See 20 page.	
	Short	D-S	No Hazard.	AVR1:0
		S-G ONLY-3R3, -5	See 20 page.	
		G-D ONLY-3R3, -5	See 20 page.	
TR502	Open	D ONLY-3R3, -5	See 20 page.	
		S ONLY-3R3, -5	See 20 page.	
		G ONLY-3R3, -5	See 20 page.	
	Short	D-S ONLY-3R3, -5	No Hazard.	AVR1:0
		S-G ONLY-3R3, -5	See 20 page.	
		G-D ONLY-3R3, -5	See 20 page.	
TR503	Open	D ONLY-3R3, -5	See 20 page.	
		S ONLY-3R3, -5	See 20 page.	
		G ONLY-3R3, -5	See 20 page.	
	Short	D-S ONLY-3R3, -5	No Hazard.	AVR1:0
		S-G ONLY-3R3, -5	See 20 page.	
		G-D ONLY-3R3, -5	See 21 page.	
VR501	Open	brush	Output voltage decreased.No hazard.	AVR1:decreased
			Output voltage decreased.No hazard.	AVR1:decreased
	Short		No Hazard.	AVR1:0
ZD101	Open		Normal operation.	
	Short		Normal operation.	
ZD121	Open		Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
ZD121	Short		Normal operation.	
ZD501	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
ZD502	Open		Normal operation. (ONLY-15, -24, -36, -48)	
	Short		No Hazard. (ONLY-15, -24, -36, -48)	AVR1:0
ZD503	Open	ONLY-36, -48	No Hazard.	AVR1:0
	Short	ONLY-36, -48	Normal operation.	
ZD551	Open	ONLY-3R3, -5	See 21 page.	
	Short	ONLY-3R3, -5	See 21 page.	

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
C109	Open		No Hazard.	AVR1:0
	Short		No Hazard.	AVR1:0
C110	Open		No Hazard.	AVR1:0
	Short		No Hazard.	AVR1:0
C551	Open	ONLY-3R3, -5	Normal operation.	
D103	Open		Normal operation.	
	Short		No Hazard.	AVR1:0
D104	Open		No Hazard.	AVR1:0
	Short		No Hazard.	AVR1:0
D106	Open		No Hazard.	AVR1:0
	Short		No Hazard.	AVR1:0
D551	Short	ONLY-3R3, -5	Normal operation.	
J106	Open		F101 opened, No hazard.	AVR1:0
L103	Open	7, 8	No Hazard.	AVR1:0
R117	Open		No Hazard.	AVR1:0
SS101	Open		Normal operation.	
SS102	Open		Normal operation.	
SS103	Open	Alternative	Normal operation. (EXCEPT-5, -3R3)	
SS501	Open	Alternative	Normal operation. (EXCEPT-5, -3R3)	
SS502	Open	Cathode	Normal operation. (EXCEPT-5, -3R3)	
		Alternative	Normal operation. (EXCEPT-5, -3R3)	
SS503	Open	Cathode	Normal operation. (ONLY-9, -12, -15)	
		Alternative	Normal operation. (ONLY-9, -12, -15)	
T201	Open	1, 6	No Hazard.	AVR1:0

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
TR102	Open	D	No Hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	No Hazard.	AVR1:0
	Short	D-S	F101 opened, No hazard.	AVR1:0
		S-G	F101 opened, No hazard.	AVR1:0
		G-D	F101 opened, No hazard.	AVR1:0
TR201	Open	D	No Hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	No Hazard.	AVR1:0
	Short	D-S	F101 opened, No hazard.	AVR1:0
		S-G	F101 opened, No hazard.	AVR1:0
		G-D	F101 opened, No hazard.	AVR1:0
TR501	Open	G ONLY-3R3, -5	Normal operation.	
	Short	S-G ONLY-3R3, -5	Normal operation.	
		G-D ONLY-3R3, -5	No Hazard.	AVR1:0
TR502	Open	D ONLY-3R3, -5	No Hazard.	AVR1:0
		S ONLY-3R3, -5	No Hazard.	AVR1:0
		G ONLY-3R3, -5	No Hazard.	AVR1:0
	Short	S-G ONLY-3R3, -5	No Hazard.	AVR1:0
		G-D ONLY-3R3, -5	No Hazard.	AVR1:0
TR503	Open	D ONLY-3R3, -5	No Hazard.	AVR1:0
		S ONLY-3R3, -5	No Hazard.	AVR1:0
		G ONLY-3R3, -5	No Hazard.	AVR1:0
	Short	S-G ONLY-3R3, -5	No Hazard.	AVR1:0



ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
TR503	Short	G-D ONLY-3R3, -5	No Hazard.	AVR1:0
ZD551	Open	ONLY-3R3, -5	Normal operation.	
	Short	ONLY-3R3, -5	Normal operation.	