

ABNORMAL TEST RESULT

OF MODEL PBW50F

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 : 2/17 ~ 15/17)

(Abnormal Test Result: 16/17 ~ 17/17)

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 AVR2:0
C102	Open	Normal operation.	
	Short	F101 opened, No hazard.	AVR1:0 AVR2:0
C103	Open	Normal operation.	
	Short	F101 opened, No hazard.	AVR1:0 AVR2:0
C108	Open	Normal operation.	
	Short	Normal operation.	
C109	Open	See 16 Page.	
	Short	See 16 Page.	
C110	Open	See 16 Page.	
	Short	See 16 Page.	
C111	Open	Normal operation.	
	Short	No Hazard.	AVR1:0 AVR2:0
C112	Open	Normal operation.	
	Short	Normal operation.	
C118	Open	See 16 Page.	
	Short	F101 opened, No hazard.	AVR1:0 AVR2:0
C129	Open	Normal operation.	
	Short	Normal operation.	
C130	Open	Normal operation.	
	Short	Normal operation.	
C131	Open	Normal operation.	
	Short	Normal operation.	

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Component	Mode	Comment	Output Voltage (V)
C201	Open	Normal operation.	
	Short	No Hazard.	AVR1:0 AVR2:0
C202	Open	Normal operation.	
	Short	No Hazard.	AVR1:0 AVR2:0
C203	Open	No Hazard.	AVR1:0 AVR2:0
	Short	Normal operation.	
C204	Open	No Hazard.	AVR1:0 AVR2:0
	Short	No Hazard.	AVR1:0 AVR2:0
C205	Open	Normal operation.	
	Short	Normal operation.	
C206	Open	No Hazard.	AVR1:0 AVR2:0
	Short	Normal operation.	
C207	Open	No Hazard.	AVR1:0 AVR2:0
	Short	Normal operation.	
C208	Open	Normal operation.	
	Short	Normal operation.	
C209	Open	Normal operation.	
	Short	Normal operation.	
C501	Open	Normal operation.	
	Short	Normal operation.	
C502	Open	Normal operation.	
	Short	Normal operation.	
C503	Open	Normal operation.	
	Short	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
C504	Open		Normal operation.	
	Short		Normal operation.	
C505	Open		No Hazard.	AVR1:0 AVR2:0
	Short		No Hazard.	AVR1:0 AVR2:0
C507	Open		No Hazard.	AVR1:0 AVR2:0
	Short		No Hazard.	AVR1:0 AVR2:0
C508	Open		Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
	Short		Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
C512	Open		Normal operation.	
	Short		Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
C515	Open	only 5V	Normal operation.	
	Short	only 5V	No Hazard.	AVR1:0 AVR2:0
C516	Open		Normal operation.	
	Short		No Hazard.	AVR1:0 AVR2:0
C517	Open		Normal operation.	
	Short		No Hazard.	AVR1:0 AVR2:0
C518	Open		Normal operation.	
	Short		No Hazard.	AVR1:0 AVR2:0
C519	Open	except 5V	Normal operation.	
	Short	except 5V	No Hazard.	AVR1:0 AVR2:0
D101	Open		Normal operation.	
	Short		Normal operation.	
D102	Open		F101 opened, No hazard.	AVR1:0 AVR2:0
	Short		F101 opened, No hazard.	AVR1:0 AVR2:0

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Component	Mode		Comment	Output Voltage (V)
D103	Open		See 16 Page.	
	Short		See 16 Page.	
D104	Open		See 16 Page.	
	Short		See 16 Page.	
D105	Open		Normal operation.	
	Short		No Hazard.	AVR1:0 AVR2:0
D106	Open		See 16 Page.	
	Short		See 16 Page.	
D107	Open		Normal operation.	
	Short		Normal operation.	
D108	Open		Normal operation.	
	Short		Normal operation.	
D201	Open		No Hazard.	AVR1:0 AVR2:0
	Short		Normal operation.	
D202	Open		No Hazard.	AVR1:0 AVR2:0
	Short		Normal operation.	
D203	Open		Normal operation.	
	Short		No Hazard.	AVR1:0 AVR2:0
D204	Open		No Hazard.	AVR1:0 AVR2:0
	Short		Normal operation.	
D501	Open		Normal operation.	
	Short		Normal operation.	
IC101	Open	1	No Hazard.	AVR1:0 AVR2:0
		2	Normal operation.	

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Component	Mode		Comment	Output Voltage (V)
IC101	Open	3	Normal operation.	
		4	Normal operation.	
		5	No Hazard.	AVR1:0 AVR2:0
		6	No Hazard.	AVR1:0 AVR2:0
		7	F101 opened, No hazard.	AVR1:0 AVR2:0
		8	No Hazard.	AVR1:0 AVR2:0
	Short	1-2	No Hazard.	AVR1:0 AVR2:0
		2-3	No Hazard.	AVR1:0 AVR2:0
		3-4	Normal operation.	
		5-6	No Hazard.	AVR1:0 AVR2:0
		6-7	No Hazard.	AVR1:0 AVR2:0
		7-8	F101 opened, No hazard.	AVR1:0 AVR2:0
IC201	Open	1	No Hazard.	AVR1:0 AVR2:0
		2	No Hazard.	AVR1:0 AVR2:0
		3	F101 opened, No hazard.	AVR1:0 AVR2:0
		4	Normal operation.	
		5	Normal operation.	
		6	Normal operation.	
		7	Normal operation.	
		8	Normal operation.	
		9	Normal operation.	
		10	No Hazard.	AVR1:0 AVR2:0
		11	No Hazard.	AVR1:0 AVR2:0
		12	No Hazard.	AVR1:0 AVR2:0

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Component	Mode		Comment	Output Voltage (V)
IC201	Open	13	Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
		14	Normal operation.	
		15	Normal operation.	
		16	Normal operation.	
		17	No Hazard.	AVR1:0 AVR2:0
		18	Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
		19	Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
		20	No Hazard.	AVR1:0 AVR2:0
	Short	1-2	Normal operation.	
		2-3	No Hazard.	AVR1:0 AVR2:0
		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 AVR2:0
		11-12	No Hazard.	AVR1:0 AVR2:0
		12-13	No Hazard.	AVR1:0 AVR2:0
		13-14	Normal operation.	
		14-15	Normal operation.	
		15-16	Normal operation.	
		16-17	Normal operation.	
		17-18	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
IC201	Short	18-19	Normal operation.	
		19-20	No Hazard.	AVR1:0 AVR2:0
IC501	Open	K	No Hazard.	AVR1:0 AVR2:0
		A	No Hazard.	AVR1:0 AVR2:0
		R	No Hazard.	AVR1:0 AVR2:0
	Short	A-K	Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
		K-R	Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
		R-A	No Hazard.	AVR1:0 AVR2:0
J201	Open		Normal operation.	
J501	Open		Normal operation.	
J502	Open		No Hazard.	AVR1:0 AVR2:0
J503	Open		Normal operation.	
J510	Open		No Hazard.	AVR1:0 AVR2:0
L101	Open		No Hazard.	AVR1:0 AVR2:0
	Short		Normal operation.	
L102	Open		No Hazard.	AVR1:0 AVR2:0
	Short		Normal operation.	
L103	Open	4, 5	No Hazard.	AVR1:0 AVR2:0
		7, 8	See 16 Page.	
		1, 8	No Hazard.	AVR1:0 AVR2:0
	Short	4-5	F101 opened, No hazard.	AVR1:0 AVR2:0
		7-8	F101 opened, No hazard.	AVR1:0 AVR2:0
		1-8	F101 opened, No hazard.	AVR1:0 AVR2:0
L507	Open	1, 2	See 16 Page.	

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Component	Mode		Comment	Output Voltage (V)
L507	Open	3, 4	See 16 Page.	
	Short	1-2	See 16 Page.	
		3-4	See 16 Page.	
		1-3	See 16 Page.	
		2-4	See 16 Page.	
LED501	Open		Normal operation.	
	Short		Normal operation.	
PC201	Open	A, K	No Hazard.	AVR1:0 AVR2:0
		C, E	No Hazard.	AVR1:0 AVR2:0
	Short	A-K	No Hazard.	AVR1:0 AVR2:0
		C-E	No Hazard.	AVR1:0 AVR2:0
PC202	Open	A, K	Normal operation.	
		C, E	Normal operation.	
	Short	A-K	Normal operation.	
		C-E	No Hazard.	AVR1:0 AVR2:0
R101	Open		Normal operation.	
R102	Open		Normal operation.	
R103	Open		Normal operation.	
R104	Open		Normal operation.	
R105	Open		Normal operation.	
R106	Open		Normal operation.	
R107	Open		Normal operation.	
R108	Open		Normal operation.	
R109	Open		Normal operation.	

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Component	Mode	Comment	Output Voltage (V)
R110	Open	Normal operation.	
R111	Open	Normal operation.	
R112	Open	Normal operation.	
R113	Open	Normal operation.	
R114	Open	Normal operation.	
R115	Open	Normal operation.	
R116	Open	Normal operation.	
R117	Open	See 16 Page.	
R119	Open	F101 opened, No hazard.	AVR1:0 AVR2:0
R120	Open	No Hazard.	AVR1:0 AVR2:0
R123	Open	Normal operation.	
R124	Open	No Hazard.	AVR1:0 AVR2:0
R125	Open	No Hazard.	AVR1:0 AVR2:0
R126	Open	No Hazard.	AVR1:0 AVR2:0
R127	Open	No Hazard.	AVR1:0 AVR2:0
R128	Open	No Hazard.	AVR1:0 AVR2:0
R129	Open	No Hazard.	AVR1:0 AVR2:0
R130	Open	No Hazard.	AVR1:0 AVR2:0
R131	Open	Normal operation.	
R132	Open	Normal operation.	
R133	Open	Normal operation.	
R136	Open	Normal operation.	
R137	Open	Normal operation.	
R138	Open	Normal operation.	

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Component	Mode	Comment	Output Voltage (V)
R151	Open	Normal operation.	
R152	Open	No Hazard.	AVR1:0 AVR2:0
R153	Open	Normal operation.	
R201	Open	Normal operation.	
R202	Open	Normal operation.	
R203	Open	Normal operation.	
R204	Open	Normal operation.	
R205	Open	No Hazard.	AVR1:0 AVR2:0
R206	Open	Normal operation.	
R207	Open	No Hazard.	AVR1:0 AVR2:0
R208	Open	Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
R209	Open	No Hazard.	AVR1:0 AVR2:0
R210	Open	F101 opened, No hazard.	AVR1:0 AVR2:0
R211	Open	Normal operation.	
R212	Open	Normal operation.	
R213	Open	No Hazard.	AVR1:0 AVR2:0
R214	Open	Normal operation.	
R215	Open	Normal operation.	
R216	Open	No Hazard.	AVR1:0 AVR2:0
R218	Open	Normal operation.	
R501	Open	Normal operation.	
R502	Open	Normal operation.	
R503	Open	Normal operation.	
R504	Open	Normal operation.	

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Component	Mode		Comment	Output Voltage (V)
R505	Open		Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
R506	Open		No Hazard.	AVR1:0 AVR2:0
R507	Open		Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
R509	Open		Normal operation.	
R510	Open		Normal operation.	
R512	Open		Normal operation.	
R517	Open		Normal operation.	
R518	Open		Normal operation.	
R521	Open		Normal operation.	
R522	Open		Normal operation.	
R531	Open		Normal operation.	
R532	Open		Normal operation.	
R551	Open		Normal operation.	
R552	Open		Normal operation.	
R553	Open		Normal operation.	
SK101	Open		Normal operation.	
	Short		No Hazard.	AVR1:0 AVR2:0
SS101	Open		No Hazard.	AVR1:0 AVR2:0
	Short		No Hazard.	AVR1:0 AVR2:0
SS501	Open	Cathode	See 16 Page.	
		Alternative	See 16 Page.	
	Short		See 16 Page.	
SS502	Open	Cathode	See 16 Page.	
		Alternative	See 16 Page.	

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Component	Mode		Comment	Output Voltage (V)
SS502	Short		See 17 Page.	
T201	Open	1, 2	No Hazard.	AVR1:0 AVR2:0
		3, 4	No Hazard.	AVR1:0 AVR2:0
		5, 6	No Hazard.	AVR1:0 AVR2:0
		8, 9	No Hazard.	AVR1:0 AVR2:0
	Short	1-2	F101 opened, No hazard.	AVR1:0 AVR2:0
		2-3	F101 opened, No hazard.	AVR1:0 AVR2:0
		5-6	F101 opened, No hazard.	AVR1:0 AVR2:0
		8-9	F101 opened, No hazard.	AVR1:0 AVR2:0
TH101	Open		No Hazard.	AVR1:0 AVR2:0
	Short		Normal operation.	
TR101	Open	D	Normal operation.	
		S	Normal operation.	
		G	Normal operation.	
	Short	D-S	No Hazard.	AVR1:0 AVR2:0
		S-G	Normal operation.	
		G-D	No Hazard.	AVR1:0 AVR2:0
TR102	Open	D	See 17 Page.	
		S	See 17 Page.	
		G	See 17 Page.	
	Short	D-S	See 17 Page.	
		S-G	See 17 Page.	
		G-D	See 17 Page.	
TR103	Open	C	Normal operation.	

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Component	Mode		Comment	Output Voltage (V)	
TR103	Open	E	Normal operation.		
		B	Normal operation.		
	Short	C-E	Normal operation.		
		E-B	Normal operation.		
		B-C	Normal operation.		
TR105	Open	C	No Hazard.	AVR1:0	AVR2:0
		E	No Hazard.	AVR1:0	AVR2:0
		B	No Hazard.	AVR1:0	AVR2:0
	Short	C-E	Normal operation.		
		E-B	No Hazard.	AVR1:0	AVR2:0
		B-C	Normal operation.		
TR201	Open	D	See 17 Page.		
		S	See 17 Page.		
		G	See 17 Page.		
	Short	D-S	See 17 Page.		
		S-G	See 17 Page.		
		G-D	See 17 Page.		
TR501	Open	C	Normal operation.		
		E	Normal operation.		
		B	Normal operation.		
	Short	C-E	No Hazard.	AVR1:0	AVR2:0
		E-B	Normal operation.		
		B-C	No Hazard.	AVR1:0	AVR2:0
VR501	Open		No Hazard.	AVR1:0	AVR2:0



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Component	Mode		Comment	Output Voltage (V)
VR501	Open	brush	Normal operation.	
	Short		Output voltage increased. No hazard.	AVR1:increased(120%) AVR2:increased(120%)
ZD121	Open		Normal operation.	
	Short		Normal operation.	
ZD123	Open		Normal operation.	
	Short		Normal operation.	
ZD501	Open		Normal operation.	
	Short		No Hazard.	AVR1:0 AVR2:0
ZD504	Open		Normal operation.	
	Short		No Hazard.	AVR1:0 AVR2:0

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
C109	Open		Normal operation.	
	Short		Normal operation.	
C110	Open		Normal operation.	
	Short		Normal operation.	
C118	Open		F101 opened, No hazard.	AVR1:0 AVR2:0
D103	Open		Normal operation.	
	Short		Normal operation.	
D104	Open		Normal operation.	
	Short		Normal operation.	
D106	Open		Normal operation.	
	Short		Normal operation.	
L103	Open	7, 8	Normal operation.	
L507	Open	1, 2	No Hazard.	AVR1:0 AVR2:0
		3, 4	No Hazard.	AVR1:0 AVR2:0
	Short	1-2	No Hazard.	AVR1:0 AVR2:0
		3-4	No Hazard.	AVR1:0 AVR2:0
		1-3	No Hazard.	AVR1:0 AVR2:0
		2-4	No Hazard.	AVR1:0 AVR2:0
R117	Open		Normal operation.	
SS501	Open	Cathode	No Hazard.	AVR1:0 AVR2:0
		Alternative	No Hazard.	AVR1:0 AVR2:0
	Short		Output voltage decreased. No hazard.	AVR1:0 AVR2:0
SS502	Open	Cathode	No Hazard.	AVR1:0 AVR2:0
		Alternative	No Hazard.	AVR1:0 AVR2:0



ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)	
SS502	Short		Output voltage decreased. No hazard.	AVR1:0	AVR2:0
TR102	Open	D	No Hazard.	AVR1:0	AVR2:0
		S	No Hazard.	AVR1:0	AVR2:0
		G	No Hazard.	AVR1:0	AVR2:0
	Short	D-S	F101 opened, No hazard.	AVR1:0	AVR2:0
		S-G	No Hazard.	AVR1:0	AVR2:0
		G-D	F101 opened, No hazard.	AVR1:0	AVR2:0
TR201	Open	D	No Hazard.	AVR1:0	AVR2:0
		S	No Hazard.	AVR1:0	AVR2:0
		G	No Hazard.	AVR1:0	AVR2:0
	Short	D-S	No Hazard.	AVR1:0	AVR2:0
		S-G	No Hazard.	AVR1:0	AVR2:0
		G-D	No Hazard.	AVR1:0	AVR2:0