

## ABNORMAL TEST RESULT

## OF MODEL PBW30F

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 : 2/11 ~ 9/11)

( Abnormal Test Result: 10/11 ~ 11/11)

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	No Hazard.	AVR1:0 AVR2:0
	Short	No Hazard.	AVR1:0 AVR2:0
C109	Open	See 10 Page.	
	Short	No Hazard.	AVR1:0 AVR2:0
C110	Open	Normal operation.	
	Short	No Hazard.	AVR1:0 AVR2:0
C113	Open	No Hazard.	AVR1:0 AVR2:0
	Short	No Hazard.	AVR1:0 AVR2:0
C114	Open	Normal operation.	
	Short	Normal operation.	
C115	Open	Normal operation.	
	Short	Normal operation.	
C120	Open	Normal operation.	
	Short	Normal operation.	
C502	Open	Output voltage decreased. No hazard.	AVR1:decreased AVR2:increased
	Short	No Hazard.	AVR1:0 AVR2:0
C506	Open	Normal operation.	
	Short	No Hazard.	AVR1:0 AVR2:0



F M E A

Component	Mode		Comment	Output Voltage (V)
C507	Open		Output voltage decreased. No hazard.	AVR1:increased AVR2:decreased
	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
C509	Open		Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
	Short		Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
C510	Open		Normal operation.	
	Short		No Hazard.	AVR1:0 AVR2:0
C514	Open		Normal operation.	
	Short		No Hazard.	AVR1:0 AVR2:0
C516	Open		Normal operation.	
	Short		No Hazard.	AVR1:0 AVR2:0
C520	Open		Normal operation.	
	Short		No Hazard.	AVR1:0 AVR2:0
C521	Open		Normal operation.	
	Short		No Hazard.	AVR1:0 AVR2:0
C524	Open		Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
	Short		Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
C526	Open		Normal operation.	
	Short		No Hazard.	AVR1:0 AVR2:0
C528	Open	only 5V	Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
	Short	only 5V	Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
D101	Open		No Hazard.	AVR1:0 AVR2:0
	Short		See 10 Page.	

F M E A

Component	Mode		Comment	Output Voltage (V)
D102	Open		Normal operation.	
	Short		Normal operation.	
D103	Open		See 10 Page.	
	Short		See 10 Page.	
D104	Open		Normal operation.	
	Short		No Hazard.	AVR1:0 AVR2:0
D501	Open		Normal operation.	
	Short		Normal operation.	
D506	Open		No Hazard.	AVR1:0 AVR2:0
	Short		See 10 Page.	
D507	Open		Normal operation.	AVR1:0 AVR2:0
	Short		Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
D508	Open		Normal operation.	
	Short		Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
IC101	Open	1 (CNT)	See 10 Page.	
		2 (S)	See 10 Page.	
		3 (D)	See 10 Page.	
	Short	1 (CNT)-2 (S)	See 10 Page.	
		1 (CNT)-3 (D)	See 10 Page.	
		2 (S)-3 (D)	See 10 Page.	
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

F M E A

Component	Mode		Comment	Output Voltage (V)
IC501	Short	K-R	Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
		R-A	No Hazard.	AVR1:0 AVR2:0
J101	Open		Normal operation.	
J111	Open		No Hazard.	AVR1:0 AVR2:0
J503	Open		Normal operation.	
L101	Open		No Hazard.	AVR1:0 AVR2:0
	Short		Normal operation.	
L102	Open		No Hazard.	AVR1:0 AVR2:0
	Short		Normal operation.	
L507	Open		No Hazard.	AVR1:0 AVR2:0
	Short		Normal operation.	
L508	Open		No Hazard.	AVR1:0 AVR2:0
	Short		Normal operation.	
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
SK101	Open		Normal operation.	



F M E A

Component	Mode		Comment	Output Voltage (V)
SK101	Short		F101 opened, No hazard	AVR1:0 AVR2:0
SS101	Open		No Hazard.	AVR1:0 AVR2:0
	Short		F101 opened, No hazard	AVR1:0 AVR2:0
SS501	Open	Cathode	See 10 Page.	
		Alternative	See 10 Page.	
	Short		See 10 Page.	
SS502	Open	Cathode	See 10 Page.	
		Alternative	See 10 Page.	
	Short		See 10 Page.	
T101	Open	2	See 10 Page.	
		3	See 10 Page.	
		4	See 10 Page.	
		5	See 10 Page.	
		6	See 10 Page.	
		7	See 11 Page.	
		9	See 11 Page.	
		10	See 11 Page.	
	Short	2-3	See 11 Page.	
		4-5	See 11 Page.	
		7-6	See 11 Page.	
		9-10	See 11 Page.	
TH101	Open		No Hazard.	AVR1:0 AVR2:0
TR101	Open	E	Normal operation.	
		C	Normal operation.	



F M E A

Component	Mode		Comment	Output Voltage (V)
TR101	Open	B	Normal operation.	
	Short	E-C	No Hazard.	AVR1:0 AVR2:0
		C-B	No Hazard.	AVR1:0 AVR2:0
		E-B	Normal operation.	
TR102	Open	E	Normal operation.	
		C	Normal operation.	
		B	Normal operation.	
	Short	E-C	No Hazard.	AVR1:0 AVR2:0
		C-B	No Hazard.	AVR1:0 AVR2:0
		E-B	Normal operation.	
TR103	Open	E	Normal operation.	
		C	Normal operation.	
		B	Normal operation.	
	Short	E-C	No Hazard.	AVR1:0 AVR2:0
		C-B	No Hazard.	AVR1:0 AVR2:0
		E-B	Normal operation.	
TR501	Open	E	Normal operation.	
		C	Normal operation.	
		B	Normal operation.	
	Short	E-C	No Hazard.	AVR1:0 AVR2:0
		C-B	No Hazard.	AVR1:0 AVR2:0
		E-B	Normal operation.	
VR501	Open	brush	Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
			Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased



F M E A

Component	Mode	Comment	Output Voltage (V)
VR501	Short	Output voltage increased. No hazard.	AVR1:increased(120%) AVR2:increased(120%)
ZD501	Open	Normal operation.	
	Short	No Hazard.	AVR1:0 AVR2:0
ZD504	Open	Normal operation.	
	Short	No Hazard.	AVR1:0 AVR2:0
R105	Open	Normal operation.	
R106	Open	Normal operation.	
R107	Open	Normal operation.	
R108	Open	Normal operation.	
R109	Open	Normal operation.	
R111	Open	Normal operation.	
R113	Open	No Hazard.	AVR1:0 AVR2:0
R114	Open	See 11 Page.	
R115	Open	Normal operation.	
R116	Open	Normal operation.	
R117	Open	Normal operation.	
R118	Open	Normal operation.	
R121	Open	Normal operation.	
R122	Open	Normal operation.	
R123	Open	Normal operation.	
R501	Open	Normal operation.	
R502	Open	Normal operation.	
R503	Open	Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
R504	Open	Normal operation.	





F M E A

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	No Hazard.	AVR1:0 AVR2:0
R509	Open	Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
R517	Open	Normal operation.	
R519	Open	Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
R521	Open	Normal operation.	
R522	Open	Normal operation.	
R523	Open	Normal operation.	
R529	Open	Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
R530	Open	Normal operation.	
R531	Open	Normal operation.	
R532	Open	Normal operation.	
R551	Open	Normal operation.	
R552	Open	Normal operation.	
R553	Open	Normal operation.	
R554	Open	No Hazard.	AVR1:0 AVR2:0

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)	
C109	Open		Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased	
C502	Open		Output voltage decreased. No hazard.	AVR1:decreased AVR2:increased	
C507	Open		Output voltage decreased. No hazard.	AVR1:increased AVR2:decreased	
D101	Short		No Hazard.	AVR1:0 AVR2:0	
D103	Open		No Hazard.	AVR1:0 AVR2:0	
	Short		No Hazard.	AVR1:0 AVR2:0	
D506	Short		No Hazard.	AVR1:0 AVR2:0	
IC101	Open	1 (CNT)	No Hazard.	AVR1:0 AVR2:0	
		2 (S)	No Hazard.	AVR1:0 AVR2:0	
		3 (D)	No Hazard.	AVR1:0 AVR2:0	
	Short	1 (CNT)-2 (S)		No Hazard.	AVR1:0 AVR2:0
		1 (CNT)-3 (D)		F101 opened, No hazard	AVR1:0 AVR2:0
		2 (S)-3 (D)		F101 opened, No hazard	AVR1:0 AVR2:0
SS501	Open	Cathode	No Hazard.	AVR1:0 AVR2:0	
		Alternative	Normal operation.		
	Short		No Hazard.	AVR1:0 AVR2:0	
SS502	Open	Cathode	No Hazard.	AVR1:0 AVR2:0	
		Alternative	Normal operation.		
	Short		No Hazard.	AVR1:0 AVR2:0	
T101	Open	2	No Hazard.	AVR1:0 AVR2:0	
		3	No Hazard.	AVR1:0 AVR2:0	
		4	No Hazard.	AVR1:0 AVR2:0	
		5	No Hazard.	AVR1:0 AVR2:0	
		6	No Hazard.	AVR1:0 AVR2:0	



ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
T101	Open	7	No Hazard.	AVR1:0 AVR2:0
		9	No Hazard.	AVR1:0 AVR2:0
		10	No Hazard.	AVR1:0 AVR2:0
	Short	2-3	No Hazard.	AVR1:0 AVR2:0
		4-5	No Hazard.	AVR1:0 AVR2:0
		7-6	No Hazard.	AVR1:0 AVR2:0
		9-10	No Hazard.	AVR1:0 AVR2:0
	R114	Open	Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased