

## ABNORMAL TEST RESULT

## OF MODEL PBW15F

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	F101 opened, No hazard	AVR1:0 AVR2:0
	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	See 10 Page.	
	Short	No Hazard.	AVR1:0 AVR2:0
C506	Open	Normal operation.	
	Short	No Hazard.	AVR1:0 AVR2:0
C507	Open	See 10 Page.	
	Short	No Hazard.	AVR1:0 AVR2:0

## F M E A

Component	Mode	Comment	Output Voltage (V)
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
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		
	Short	No Hazard.	AVR1:0 AVR2:0
D101	Open	No Hazard.	AVR1:0 AVR2:0
	Short	No Hazard.	AVR1:0 AVR2:0
D102	Open	Normal operation.	
	Short	Normal operation.	
D103	Open	No Hazard.	AVR1:0 AVR2:0
	Short	See 10 Page.	
D501	Open	Normal operation.	
	Short	Normal operation.	
D502	Open	See 10 Page.	
	Short	See 10 Page.	

## F M E A

Component	Mode		Comment	Output Voltage (V)
D503	Open		See 10 Page.	
	Short		See 10 Page.	
D504	Open		See 10 Page.	
	Short		See 10 Page.	
D505	Open		See 10 Page.	
	Short		See 10 Page.	
D506	Open		No Hazard.	AVR1:0 AVR2:0
	Short		See 10 Page.	AVR1:0 AVR2:0
D507	Open		Normal operation.	
	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
		K-R	Output voltage decreased. No hazard.	AVR1:decreased AVR2:decreased
		R-A	No Hazard.	AVR1:0 AVR2:0

## F M E A

Component	Mode		Comment	Output Voltage (V)
J501	Open		Normal operation.	
J502	Open		Normal operation.	
J503	Open		Normal operation.	
L101	Open		Normal operation.	
	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.	
SK101	Open		Normal operation.	
	Short		F101 opened, No hazard	AVR1:0 AVR2:0
SS101	Open		No Hazard.	AVR1:0 AVR2:0

## F M E A

Component	Mode		Comment	Output Voltage (V)
SS101	Short		F101 opened, No hazard	AVR1:0 AVR2:0
T101	Open	1	See 10 Page.	
		2	See 10 Page.	
		4	See 10 Page.	
		5	See 10 Page.	
		7	See 10 Page.	
		8	See 11 Page.	
		9	See 11 Page.	
		10	See 11 Page.	
	Short	1-2	See 11 Page.	
		3-4	See 11 Page.	
		4-5	See 11 Page.	
		7-8	See 11 Page.	
		9-10	See 11 Page.	
TH101	Open		No Hazard.	
TR101	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.	
TR102	Open	E	Normal operation.	
		C	Normal operation.	
		B	Normal operation.	

## F M E A

Component	Mode		Comment	Output Voltage (V)
TR102	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
	Short		Output voltage increased. No hazard.	AVR1:increased(120%) AVR2:increased(120%)
ZD501	Open		Normal operation.	
	Short		No Hazard.	
ZD504	Open		Normal operation.	
	Short		No Hazard.	AVR1:0 AVR2:0
R105	Open		Normal operation.	
R106	Open		Normal operation.	

## F M E A

Component	Mode	Comment	Output Voltage (V)
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	No Hazard.	AVR1:0 AVR2:0
R116	Open	No Hazard.	AVR1:0 AVR2:0
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.	
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	Normal operation.	
R521	Open	Normal operation.	
R522	Open	Normal operation.	
R523	Open	Normal operation.	



F M E A

Component	Mode		Comment	Output Voltage (V)
R524	Open		Normal operation.	
R525	Open	only 12V	Normal operation.	
R530	Open		Normal operation.	
R531	Open		Normal operation.	
R532	Open		Normal operation.	
R533	Open		Normal operation.	
R534	Open	only 12V	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		Normal operation.	
C502	Open		Output voltage decreased. No hazard.	AVR1:increased AVR2:decreased
C507	Open		Output voltage decreased. No hazard.	AVR1:decreased AVR2:increased
D103	Short		No Hazard.	AVR1:0 AVR2:0
D502	Open		Normal operation.	
	Short		No Hazard.	AVR1:0 AVR2:0
D503	Open		Normal operation.	
	Short		No Hazard.	AVR1:0 AVR2:0
D504	Open		Normal operation.	
	Short		No Hazard.	AVR1:0 AVR2:0
D505	Open		Normal operation.	
	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
	Short	3 (D)	No Hazard.	AVR1:0 AVR2:0
		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
T101	Open	1	No Hazard.	AVR1:0 AVR2:0
		2	No Hazard.	AVR1:0 AVR2:0
		4	No Hazard.	AVR1:0 AVR2:0
		5	No Hazard.	AVR1:0 AVR2:0
		7	No Hazard.	AVR1:0 AVR2:0



ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
T101	Open	8	No Hazard.	AVR1:0 AVR2:0
		9	No Hazard.	AVR1:0 AVR2:0
		10	No Hazard.	AVR1:0 AVR2:0
	Short	1-2	No Hazard.	AVR1:0 AVR2:0
		3-4	No Hazard.	AVR1:0 AVR2:0
		4-5	No Hazard.	AVR1:0 AVR2:0
		7-8	No Hazard.	AVR1:0 AVR2:0
		9-10	No Hazard.	AVR1:0 AVR2:0
R114	Open		Normal operation.	