

ABNORMAL TEST RESULT

OF MODEL CES48

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 : 2/31 ~ 27/31)

(Abnormal Test Result: 28/31 ~ 31/31)

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		External Fuse opened, No hazard.	0[V]
C102	Open		Normal operation.	
	Short		External Fuse opened, No hazard.	0[V]
C103	Open		Normal operation.	
	Short		External Fuse opened, No hazard.	0[V]
C107	Open		Normal operation.	
	Short		See 28 Page.	
C108	Open		Normal operation.	
	Short		Normal operation.	
C109	Open		Normal operation.	
	Short		Normal operation.	
C110	Open		Normal operation.	
	Short		Normal operation.	
C151	Open		Normal operation.	
	Short		Normal operation.	
C153	Open		Normal operation.	
	Short		See 28 Page.	
C154	Open	Only 050, 060, 120, 150	Normal operation.	
	Short	Only 050, 060, 120, 150	Normal operation.	
C201	Open		Normal operation.	
	Short		No Hazard.	0[V]
C202	Open		Normal operation.	
	Short		No Hazard.	0[V]

F M E A

Component	Mode		Comment	Output Voltage (V)
C203	Open		See 28 Page.	
	Short		No Hazard.	0[V]
C204	Open		Normal operation.	
	Short		No Hazard.	0[V]
C205	Open		Normal operation.	
	Short		See 28 Page.	
C206	Open	Except 120, 150	No Hazard.	0[V]
	Short	Except 120, 150	See 28 Page.	
	Open	Only 120, 150	No Hazard.	0[V]
	Short	Only 120, 150	No Hazard.	0[V]
C207	Open	Except 015 018	Normal operation.	
	Short	Except 015 018	Normal operation.	
C210	Open		Normal operation.	
	Short		No Hazard.	0[V]
C251	Open		Normal operation.	
	Short		Normal operation.	
C252	Open		Normal operation.	
	Short		See 28 Page.	
C253	Open		Normal operation.	
	Short		No Hazard.	0[V]
C255	Open		Normal operation.	
	Short		Normal operation.	
C302	Open		No Hazard.	0[V]
	Short		Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
C303	Open		Normal operation.	
	Short		Normal operation.	
C304	Open		No Hazard.	0[V]
	Short		Normal operation.	
C311	Open	Only 050, 060, 120, 150	Normal operation.	
	Short	Only 050, 060, 120, 150	Normal operation.	
C351	Open		Output voltage decreased. No hazard.	Decreased
	Short		Output voltage decreased. No hazard.	Decreased
C352	Open		Output voltage decreased. No hazard.	Decreased
	Short		Normal operation.	
C354	Open		Output voltage decreased. No hazard.	Decreased
	Short		Output voltage decreased. No hazard.	Decreased
C501	Open	Only 050 060	Normal operation.	
	Short	Only 050 060	Normal operation.	
C502	Open	Only 050 060	Normal operation.	
	Short	Only 050 060	Normal operation.	
C503	Open	Only 050 060	Normal operation.	
	Short	Only 050 060	Normal operation.	
C504	Open	Only 050 060	Normal operation.	
	Short	Only 050 060	Normal operation.	
C505	Open		Normal operation.	
	Short		No Hazard.	0[V]
C506	Open		Normal operation.	
	Short		No Hazard.	0[V]

F M E A

Component	Mode		Comment	Output Voltage (V)
C507	Open		Normal operation.	
	Short		No Hazard.	0[V]
C508	Open		Normal operation.	
	Short		No Hazard.	0[V]
C601	Open		Normal operation.	
	Short		See 28 Page.	
C602	Open		Normal operation.	
	Short		See 28 Page.	
C603	Open		See 28 Page.	
	Short		Normal operation.	
C604	Open		See 28 Page.	
	Short		Normal operation.	
C606	Open	Only 050, 060, 120, 150	Normal operation.	
	Short	Only 050, 060, 120, 150	See 28 Page.	
C608	Open	Only 120, 150	Normal operation.	
	Short	Only 120, 150	Normal operation.	
C609	Open	Only 120, 150	Normal operation.	
	Short	Only 120, 150	Normal operation.	
C610	Open	Only 120, 150	Normal operation.	
	Short	Only 120, 150	No Hazard.	0[V]
C701	Open		Normal operation.	
	Short		See 28 Page.	
C702	Open	Except 120, 150	Normal operation.	
	Short	Except 120, 150	No Hazard.	0[V]

F M E A

Component	Mode		Comment	Output Voltage (V)
C703	Open		Normal operation.	
	Short		See 28 Page.	
C704	Open		No Hazard.	0[V]
	Short		Normal operation.	
C706	Open		Normal operation.	
	Short		No Hazard.	0[V]
C707	Open		Normal operation.	
	Short		No Hazard.	0[V]
C708	Open		Normal operation.	
	Short		No Hazard.	0[V]
C709	Open		See 28 Page.	
	Short		See 28 Page.	
C710	Open		See 28 Page.	
	Short		No Hazard.	0[V]
C712	Open	Only 050, 060, 120, 150	Normal operation.	
	Short	Only 050, 060, 120, 150	See 28 Page.	
C713	Open		Normal operation.	
	Short		No Hazard.	0[V]
C714	Open		Normal operation.	
	Short		No Hazard.	0[V]
C717	Open		Normal operation.	
	Short		Normal operation.	
C718	Open		Normal operation.	
	Short		Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
C721	Open		Normal operation.	
	Short		No Hazard.	0[V]
D101	Open	Except 120, 150	See 28 Page.	
	Short	Except 120, 150	Normal operation.	
D102	Open	Except 050 060	Normal operation.	
	Short	Except 050 060	Normal operation.	
D151	Open		Normal operation.	
	Short		Normal operation.	
D153	Open		No Hazard.	0[V]
	Short		No Hazard.	0[V]
D154	Open		No Hazard.	0[V]
	Short		No Hazard.	0[V]
D201	Open	Except 015 018	Normal operation.	
	Short	Except 015 018	Normal operation.	
D202	Open	Except 120, 150	No Hazard.	0[V]
	Short	Except 120, 150	Normal operation.	
	Open	Only 120, 150	Normal operation.	
	Short	Only 120, 150	Normal operation.	
D203	Open	Except 120, 150	Normal operation.	
	Short	Except 120, 150	No Hazard.	0[V]
D251	Open		Normal operation.	
	Short		No Hazard.	0[V]
D252	Open		Normal operation.	
	Short		Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
D351	Open		Output voltage decreased. No hazard.	Decreased
	Short		Normal operation.	
D352	Open		Normal operation.	
	Short		Output voltage decreased. No hazard.	Decreased
D601	Open		Normal operation.	
	Short		Normal operation.	
D602	Open		No Hazard.	0[V]
	Short		Normal operation.	
D603	Open	Except 120, 150	See 28 Page.	
	Short	Except 120, 150	See 28 Page.	
	Open	Only 120, 150	Normal operation.	
	Short	Only 120, 150	No Hazard.	0[V]
D604	Open		No Hazard.	0[V]
	Short		No Hazard.	0[V]
D605	Open		No Hazard.	0[V]
	Short		No Hazard.	0[V]
D606	Open	Except 050, 060, 120, 150	No Hazard.	0[V]
		Only 050, 060, 120, 150	Normal operation.	
	Short		No Hazard.	0[V]
D607	Open	Only 120, 150	No Hazard.	0[V]
	Short	Only 120, 150	No Hazard.	0[V]
D608	Open	Only 120, 150	No Hazard.	0[V]
	Short	Only 120, 150	Normal operation.	
D609	Open	Only 120, 150	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
D609	Short	Only 120, 150	No Hazard.	0[V]
D701	Open		No Hazard.	0[V]
	Short		No Hazard.	0[V]
D705	Open		Normal operation.	
	Short		See 28 Page.	
D706	Open		See 28 Page.	
	Short		See 28 Page.	
IC201	Open	1	No Hazard.	0[V]
		2	No Hazard.	0[V]
		3	No Hazard.	0[V]
		4	No Hazard.	0[V]
		5	No Hazard.	0[V]
		6	No Hazard.	0[V]
		7	No Hazard.	0[V]
		8	Normal operation.	
	Short	1-2	No Hazard.	0[V]
		2-3	No Hazard.	0[V]
		3-4	No Hazard.	0[V]
		5-6	No Hazard.	0[V]
		6-7	No Hazard.	0[V]
		7-8	Normal operation.	
IC251	Open	1	Normal operation.	
		2	Normal operation.	
		3	No Hazard.	0[V]

F M E A

Component	Mode		Comment	Output Voltage (V)
IC251	Open	4	No Hazard.	0[V]
		5	Normal operation.	
	Short	1-2	Normal operation.	
		2-3	Normal operation.	
		4-5	No Hazard.	0[V]
IC701	Open	1	Normal operation.	
		2	Normal operation.	
		3	Normal operation.	
		4	Normal operation.	
		5	Normal operation.	
	Short	1-2	Normal operation.	
		2-3	No Hazard.	0[V]
		4-5	Normal operation.	
IC702	Open	1	No Hazard.	0[V]
		2	No Hazard.	0[V]
		3	No Hazard.	0[V]
		4	No Hazard.	0[V]
		5	No Hazard.	0[V]
	Short	1-2	No Hazard.	0[V]
		2-3	No Hazard.	0[V]
		4-5	No Hazard.	0[V]
IC703	Open	1	Normal operation.	
		2	Normal operation.	
		3	No Hazard.	0[V]

F M E A

Component	Mode		Comment	Output Voltage (V)
IC703	Open	4	No Hazard.	0[V]
		5	Normal operation.	
	Short	1-2	Normal operation.	
		2-3	No Hazard.	0[V]
		4-5	No Hazard.	0[V]
L101	Open		No Hazard.	0[V]
	Short		Normal operation.	
L151	Open		No Hazard.	0[V]
	Short		No Hazard.	0[V]
PC201	Open	A, K	No Hazard.	0[V]
		C, E	No Hazard.	0[V]
	Short	A-K	No Hazard.	0[V]
		C-E	No Hazard.	0[V]
PC301	Open	A, K	Normal operation.	
		C, E	Normal operation.	
	Short	A-K	Normal operation.	
		C-E	No Hazard.	0[V]
PTH301	Open	Only 050, 060, 120, 150	No Hazard.	0[V]
	Short	Only 050, 060, 120, 150	Normal operation.	
PTH701	Open	Except 050, 060, 120, 150	No Hazard.	0[V]
	Short	Except 050, 060, 120, 150	Normal operation.	
T102	Open	1	No Hazard.	0[V]
		2	See 28 Page.	
		3	See 29 Page.	

F M E A

Component	Mode		Comment	Output Voltage (V)
T102	Open	4	Normal operation.	
		5	Normal operation.	
	Short	1-2	Normal operation.	
		2-3	Normal operation.	
TR101	Open	C	No Hazard.	0[V]
		E	No Hazard.	0[V]
		B	No Hazard.	0[V]
	Short	C-E	No Hazard.	0[V]
		E-B	No Hazard.	0[V]
		B-C	No Hazard.	0[V]
TR102	Open	C	No Hazard.	0[V]
		E	No Hazard.	0[V]
		B	No Hazard.	0[V]
	Short	C-E	No Hazard.	0[V]
		E-B	No Hazard.	0[V]
		B-C	No Hazard.	0[V]
TR103	Open	D	See 29 Page.	
		S	See 29 Page.	
		G	See 29 Page.	
	Short	D-S	See 29 Page.	
		S-G	See 29 Page.	
		G-D	See 29 Page.	
TR151	Open	C Except 050, 060, 120, 150	Normal operation.	
		E Except 050, 060, 120, 150	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
TR151	Open	B Except 050, 060, 120, 150	Normal operation.	
	Short	C-E Except 050, 060, 120, 150	See 29 Page.	
		E-B Except 050, 060, 120, 150	Normal operation.	
		B-C Except 050, 060, 120, 150	No Hazard.	0[V]
	Open	D Only 050, 060, 120, 150	Normal operation.	
		S Only 050, 060, 120, 150	Normal operation.	
		G Only 050, 060, 120, 150	Normal operation.	
	Short	D-S Only 050, 060, 120, 150	See 29 Page.	
		S-G Only 050, 060, 120, 150	Normal operation.	
		G-D Only 050, 060, 120, 150	No Hazard.	0[V]
TR152	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	No Hazard.	0[V]
		E-B	Normal operation.	
		B-C	No Hazard.	0[V]
TR153	Open	C	No Hazard.	0[V]
		E	No Hazard.	0[V]
		B	No Hazard.	0[V]
	Short	C-E	Normal operation.	
		E-B	Normal operation.	
		B-C	Normal operation.	
TR154	Open	D Only 050, 060, 120, 150	Normal operation.	
		S Only 050, 060, 120, 150	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
TR154	Open	G Only 050, 060, 120, 150	Normal operation.	
	Short	D-S Only 050, 060, 120, 150	Normal operation.	
		S-G Only 050, 060, 120, 150	Normal operation.	
		G-D Only 050, 060, 120, 150	Normal operation.	
TR201	Open	D Except 015 018	No Hazard.	0[V]
		S Except 015 018	No Hazard.	0[V]
		G Except 015 018	No Hazard.	0[V]
	Short	D-S Except 015 018	Normal operation.	
		S-G Except 015 018	No Hazard.	0[V]
		G-D Except 015 018	No Hazard.	0[V]
TR202	Open	C Except 015 018	Normal operation.	
		E Except 015 018	Normal operation.	
		B Except 015 018	Normal operation.	
	Short	C-E Except 015 018	No Hazard.	0[V]
		E-B Except 015 018	Normal operation.	
		B-C Except 015 018	No Hazard.	0[V]
TR203	Open	C Only 120, 150	No Hazard.	0[V]
		E Only 120, 150	No Hazard.	0[V]
		B Only 120, 150	No Hazard.	0[V]
	Short	C-E Only 120, 150	See 29 Page.	
		E-B Only 120, 150	No Hazard.	0[V]
		B-C Only 120, 150	See 29 Page.	
TR251	Open	C	Normal operation.	
		E	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
TR251	Open	B	Normal operation.	
	Short	C-E	Normal operation.	
		E-B	Normal operation.	
		B-C	Normal operation.	
TR252	Open	D	Normal operation.	
		S	Normal operation.	
		G	Normal operation.	
	Short	D-S	Normal operation.	
		S-G	Normal operation.	
		G-D	No Hazard.	0[V]
TR253	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	No Hazard.	0[V]
		E-B	No Hazard.	0[V]
		B-C	No Hazard.	0[V]
TR254	Open	C	Normal operation.	
		E	No Hazard.	0[V]
		B	No Hazard.	0[V]
	Short	C-E	Normal operation.	
		E-B	Normal operation.	
		B-C	Normal operation.	
TR303	Open	C	Normal operation.	
		E	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
TR303	Open	B	Normal operation.	
	Short	C-E	No Hazard.	0[V]
		E-B	Normal operation.	
		B-C	No Hazard.	0[V]
TR304	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	No Hazard.	0[V]
		E-B	Normal operation.	
		B-C	No Hazard.	0[V]
TR306	Open	D	Normal operation.	
		S	Normal operation.	
		G	Normal operation.	
	Short	D-S	Normal operation.	
		S-G	Normal operation.	
		G-D	Normal operation.	
TR308	Open	D	Normal operation.	
		S	Normal operation.	
		G	Normal operation.	
	Short	D-S	No Hazard.	0[V]
		S-G	Normal operation.	
		G-D	No Hazard.	0[V]
TR310	Open	D	Normal operation.	
		S	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
TR310	Open	G	Normal operation.	
	Short	D-S	No Hazard.	0[V]
		S-G	Normal operation.	
		G-D	No Hazard.	0[V]
TR311	Open	C Only 050, 060, 120, 150	Normal operation.	
		E Only 050, 060, 120, 150	Normal operation.	
		B Only 050, 060, 120, 150	Normal operation.	
	Short	C-E Only 050, 060, 120, 150	No Hazard.	0[V]
		E-B Only 050, 060, 120, 150	No Hazard.	0[V]
		B-C Only 050, 060, 120, 150	Normal operation.	
TR312	Open	D Only 050, 060, 120, 150	Normal operation.	
		S Only 050, 060, 120, 150	Normal operation.	
		G Only 050, 060, 120, 150	Normal operation.	
	Short	D-S Only 050, 060, 120, 150	Normal operation.	
		S-G Only 050, 060, 120, 150	Normal operation.	
		G-D Only 050, 060, 120, 150	No Hazard.	0[V]
TR351	Open	C	Normal operation.	
		E	No Hazard.	0[V]
		B	Normal operation.	
	Short	C-E	Normal operation.	
		E-B	Normal operation.	
		B-C	Normal operation.	
TR352	Open	C	Normal operation.	
		E	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
TR352	Open	B	Normal operation.	
	Short	C-E	No Hazard.	0[V]
		E-B	No Hazard.	0[V]
		B-C	Normal operation.	
TR501	Open	D Except 120, 150	See 29 Page.	
		S Except 120, 150	See 29 Page.	
		G Except 120, 150	See 29 Page.	
	Short	D-S Except 120, 150	See 29 Page.	
		S-G Except 120, 150	See 29 Page.	
		G-D Except 120, 150	See 29 Page.	
TR502	Open	D Except 120, 150	See 29 Page.	
		S Except 120, 150	See 29 Page.	
		G Except 120, 150	See 29 Page.	
	Short	D-S Except 120, 150	See 29 Page.	
		S-G Except 120, 150	See 29 Page.	
		G-D Except 120, 150	See 29 Page.	
	Open	D Only 120, 150	See 29 Page.	
		S Only 120, 150	See 30 Page.	
		G Only 120, 150	See 30 Page.	
	Short	D-S Only 120, 150	See 30 Page.	
		S-G Only 120, 150	See 30 Page.	
		G-D Only 120, 150	See 30 Page.	
TR505	Open	D Except 050, 060, 120, 150	See 30 Page.	
		S Except 050, 060, 120, 150	See 30 Page.	

F M E A

Component	Mode		Comment	Output Voltage (V)
TR505	Open	G Except 050, 060, 120, 150	See 30 Page.	
		D-S Except 050, 060, 120, 150	See 30 Page.	
	Short	S-G Except 050, 060, 120, 150	See 30 Page.	
		G-D Except 050, 060, 120, 150	See 30 Page.	
		D Only 050, 060, 120, 150	See 30 Page.	
	Open	S Only 050, 060, 120, 150	See 30 Page.	
		G Only 050, 060, 120, 150	See 30 Page.	
		D-S Only 050, 060, 120, 150	See 30 Page.	
	Short	S-G Only 050, 060, 120, 150	See 30 Page.	
		G-D Only 050, 060, 120, 150	See 30 Page.	
TR506	Open	D Except 050, 060, 120, 150	See 30 Page.	
		S Except 050, 060, 120, 150	See 30 Page.	
		G Except 050, 060, 120, 150	See 30 Page.	
	Short	D-S Except 050, 060, 120, 150	See 30 Page.	
		S-G Except 050, 060, 120, 150	See 30 Page.	
		G-D Except 050, 060, 120, 150	See 30 Page.	
TR601	Open	D	Normal operation.	
		S	Normal operation.	
		G	Normal operation.	
	Short	D-S	Normal operation.	
		S-G	Normal operation.	
		G-D	Normal operation.	
TR602	Open	D	Normal operation.	
		S	Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
TR602	Open	G	Normal operation.	
	Short	D-S	Normal operation.	
		S-G	Normal operation.	
		G-D	Normal operation.	
TR603	Open	D	No Hazard.	0[V]
		S	No Hazard.	0[V]
		G	Normal operation.	
	Short	D-S	No Hazard.	0[V]
		S-G	No Hazard.	0[V]
		G-D	See 30 Page.	
TR604	Open	D	No Hazard.	0[V]
		S	No Hazard.	0[V]
		G	No Hazard.	0[V]
	Short	D-S	See 31 Page.	
		S-G	No Hazard.	0[V]
		G-D	No Hazard.	0[V]
TR605	Open	D	No Hazard.	0[V]
		S	No Hazard.	0[V]
		G	No Hazard.	0[V]
	Short	D-S	No Hazard.	0[V]
		S-G	No Hazard.	0[V]
		G-D	See 31 Page.	
TR701	Open	C	No Hazard.	0[V]
		E	No Hazard.	0[V]

F M E A

Component	Mode		Comment	Output Voltage (V)
TR701	Open	B	No Hazard.	0[V]
	Short	C-E	No Hazard.	0[V]
		E-B	No Hazard.	0[V]
		B-C	No Hazard.	0[V]
TR702	Open	C Except 050, 060, 120, 150	Normal operation.	
		E Except 050, 060, 120, 150	Normal operation.	
		B Except 050, 060, 120, 150	Normal operation.	
	Short	C-E Except 050, 060, 120, 150	No Hazard.	0[V]
		E-B Except 050, 060, 120, 150	Normal operation.	
		B-C Except 050, 060, 120, 150	No Hazard.	0[V]
TR703	Open	C	Normal operation.	
		E	Normal operation.	
		B	Normal operation.	
	Short	C-E	No Hazard.	0[V]
		E-B	Normal operation.	
		B-C	No Hazard.	0[V]
TR704	Open	C	No Hazard.	0[V]
		E	No Hazard.	0[V]
		B	No Hazard.	0[V]
	Short	C-E	No Hazard.	0[V]
		E-B	No Hazard.	0[V]
		B-C	No Hazard.	0[V]
ZD151	Open		No Hazard.	0[V]
	Short		Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
ZD152	Open		No Hazard.	0[V]
	Short		Normal operation.	
ZD201	Open		See 31 Page.	
	Short		No Hazard.	0[V]
ZD251	Open		Normal operation.	
	Short		Normal operation.	
ZD252	Open		No Hazard.	0[V]
	Short		Normal operation.	
ZD254	Open		Normal operation.	
	Short		Normal operation.	
ZD302	Open		Normal operation.	
	Short		No Hazard.	0[V]
ZD601	Open		Normal operation.	
	Short		No Hazard.	0[V]
ZD602	Open		No Hazard.	0[V]
	Short		No Hazard.	0[V]
ZD603	Open	Only 050, 060, 120, 150	Normal operation.	
	Short	Only 050, 060, 120, 150	Normal operation.	
ZD701	Open		No Hazard.	0[V]
	Short		No Hazard.	0[V]
R101	Open		No Hazard.	0[V]
R102	Open		See 31 Page.	
R103	Open	Except 120, 150	Normal operation.	
R104	Open		No Hazard.	0[V]

F M E A

Component	Mode		Comment	Output Voltage (V)
R105	Open		No Hazard.	0[V]
			Normal operation.	
R106	Open		Normal operation.	
R108	Open		Normal operation.	
R109	Open		Normal operation.	
R110	Open		No Hazard.	0[V]
R151	Open	Except 050, 060, 120, 150	Normal operation.	
		Only 050, 060, 120, 150	Normal operation.	
R152	Open	Except 050, 060, 120, 150	Normal operation.	
		Only 050, 060, 120, 150	Normal operation.	
R154	Open	Except 050, 060, 120, 150	Normal operation.	
R155	Open	Except 050, 060, 120, 150	Normal operation.	
R157	Open		Normal operation.	
R158	Open		Normal operation.	
R159	Open		Normal operation.	
R160	Open		Normal operation.	
R161	Open		Normal operation.	
R162	Open		Normal operation.	
R201	Open		No Hazard.	0[V]
R202	Open		No Hazard.	0[V]
R203	Open		Normal operation.	
R204	Open	Except 050, 060, 120, 150	Normal operation.	
R206	Open		See 31 Page.	
R207	Open		No Hazard.	0[V]

F M E A

Component	Mode		Comment	Output Voltage (V)
R208	Open		No Hazard.	0[V]
R210	Open		No Hazard.	0[V]
R211	Open		No Hazard.	0[V]
R212	Open		No Hazard.	0[V]
R213	Open		No Hazard.	0[V]
R214	Open	Except 015, 018	Normal operation.	
R216	Open	Except 015, 018	Normal operation.	
R217	Open	Only 050, 060, 120, 150	No Hazard.	0[V]
R218	Open	Only 120, 150	Normal operation.	
R219	Open	Only 120, 150	Normal operation.	
R251	Open		Normal operation.	
R252	Open		No Hazard.	0[V]
R253	Open		Normal operation.	
R254	Open		No Hazard.	0[V]
R255	Open		No Hazard.	0[V]
R257	Open		Normal operation.	
R258	Open		Normal operation.	
R259	Open		Normal operation.	
R261	Open		Normal operation.	
R262	Open	Except 050, 060, 120, 150	Normal operation.	
R264	Open	Only 050, 060, 120, 150	Normal operation.	
R305	Open		Normal operation.	
R306	Open		Normal operation.	
R307	Open		No Hazard.	0[V]

F M E A

Component	Mode		Comment	Output Voltage (V)
R308	Open		Normal operation.	
R310	Open		Normal operation.	
R311	Open	Only 050, 060, 120, 150	Normal operation.	
R312	Open	Only 050, 060, 120, 150	Normal operation.	
R313	Open	Only 050, 060, 120, 150	Normal operation.	
R351	Open		Output voltage decreased. No hazard.	Decreased
R352	Open		Normal operation.	
R353	Open		Output voltage decreased. No hazard.	Decreased
R354	Open		Output voltage decreased. No hazard.	Decreased
R355	Open		Output voltage decreased. No hazard.	Decreased
R356	Open	Except 015 018 025	Output voltage decreased. No hazard.	Decreased
R358	Open		Normal operation.	
R359	Open		Output voltage decreased. No hazard.	Decreased
R360	Open		Output voltage decreased. No hazard.	Decreased
R501	Open		Normal operation.	
R502	Open	Only 050	Normal operation.	
R503	Open	Only 050	Normal operation.	
R601	Open		Normal operation.	
R602	Open		Normal operation.	
R603	Open		Normal operation.	
R604	Open		Normal operation.	
R605	Open		Normal operation.	
R606	Open		No Hazard.	0[V]
R607	Open		Normal operation.	

F M E A

Component	Mode		Comment	Output Voltage (V)
R608	Open	Only 120, 150	No Hazard.	0[V]
R701	Open		No Hazard.	0[V]
R702	Open		No Hazard.	0[V]
R705	Open	Except 050, 060, 120, 150	Normal operation.	
R707	Open	Except 050, 060, 120, 150	Normal operation.	
		Only 050, 060, 120, 150	Normal operation.	
R708	Open	Except 050, 060, 120, 150	Normal operation.	
R709	Open		No Hazard.	0[V]
R710	Open		Normal operation.	
R711	Open		Normal operation.	
R712	Open		No Hazard.	0[V]
R713	Open		No Hazard.	0[V]
R714	Open		See 31 Page.	
R715	Open		See 31 Page.	
R716	Open		No Hazard.	0[V]
R718	Open		No Hazard.	0[V]
R719	Open		No Hazard.	0[V]
R720	Open		No Hazard.	0[V]
R721	Open	Only 015	No Hazard.	0[V]
	Short	Only 015	No Hazard.	0[V]
R722	Open		No Hazard.	0[V]
R723	Open		No Hazard.	0[V]
R724	Open		Output voltage increased. No hazard.	Increased
R725	Open		No Hazard.	0[V]

F M E A

Component	Mode		Comment	Output Voltage (V)
R727	Open		No Hazard.	0[V]
R728	Open		Normal operation.	
R729	Open		No Hazard.	0[V]
R733	Open		Normal operation.	
R734	Open		Normal operation.	
R735	Open	Except 120, 150	Normal operation.	
R736	Open	Only 050 120, 150	Normal operation.	

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
C107	Short		No Hazard.	0[V]
C153	Short		No Hazard.	0[V]
C203	Open		Normal operation.	
C205	Short		No Hazard.	0[V]
C206	Short	Except 120, 150	No Hazard.	0[V]
C252	Short		Normal operation.	
C601	Short		No Hazard.	0[V]
C602	Short		No Hazard.	0[V]
C603	Open		Normal operation.	
C604	Open		Normal operation.	
C606	Short	Only 050, 060, 120, 150	No Hazard.	0[V]
C701	Short		No Hazard.	0[V]
C703	Short		No Hazard.	0[V]
C709	Open		Normal operation.	
	Short		Normal operation.	
C710	Open		Normal operation.	
C712	Short	Only 050, 060, 120, 150	No Hazard.	0[V]
D101	Open	Except 120, 150	No Hazard.	0[V]
D603	Open	Except 120, 150	Normal operation.	
	Short	Except 120, 150	Normal operation.	
D705	Short		Normal operation.	
D706	Open		Normal operation.	
	Short		Normal operation.	
T102	Open	2	Normal operation.	

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
T102	Open	3	Normal operation.	
TR103	Open	D	No Hazard.	0[V]
		S	No Hazard.	0[V]
		G	No Hazard.	0[V]
	Short	D-S	No Hazard.	0[V]
		S-G	No Hazard.	0[V]
		G-D	No Hazard.	0[V]
TR151	Short	C-E Except 050, 060, 120, 150	No Hazard.	0[V]
		D-S Only 050, 060, 120, 150	No Hazard.	0[V]
TR203	Short	C-E Only 120, 150	No Hazard.	0[V]
		B-C Only 120, 150	No Hazard.	0[V]
TR501	Open	D Except 120, 150	Normal operation.	
		S Except 120, 150	Normal operation.	
		G Except 120, 150	Normal operation.	
	Short	D-S Except 120, 150	No Hazard.	0[V]
		S-G Except 120, 150	No Hazard.	0[V]
		G-D Except 120, 150	No Hazard.	0[V]
TR502	Open	D Except 120, 150	Normal operation.	
		S Except 120, 150	Normal operation.	
		G Except 120, 150	Normal operation.	
	Short	D-S Except 120, 150	No Hazard.	0[V]
		S-G Except 120, 150	No Hazard.	0[V]
		G-D Except 120, 150	No Hazard.	0[V]
	Open	D Only 120, 150	No Hazard.	0[V]

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
TR502	Open	S Only 120, 150	No Hazard.	0[V]
		G Only 120, 150	No Hazard.	0[V]
	Short	D-S Only 120, 150	No Hazard.	0[V]
		S-G Only 120, 150	No Hazard.	0[V]
		G-D Only 120, 150	No Hazard.	0[V]
TR505	Open	D Except 050, 060, 120, 150	Normal operation.	
		S Except 050, 060, 120, 150	Normal operation.	
		G Except 050, 060, 120, 150	Normal operation.	
	Short	D-S Except 050, 060, 120, 150	No Hazard.	0[V]
		S-G Except 050, 060, 120, 150	No Hazard.	0[V]
		G-D Except 050, 060, 120, 150	No Hazard.	0[V]
	Open	D Only 050, 060, 120, 150	No Hazard.	0[V]
		S Only 050, 060, 120, 150	No Hazard.	0[V]
		G Only 050, 060, 120, 150	No Hazard.	0[V]
	Short	D-S Only 050, 060, 120, 150	No Hazard.	0[V]
		S-G Only 050, 060, 120, 150	No Hazard.	0[V]
		G-D Only 050, 060, 120, 150	No Hazard.	0[V]
TR506	Open	D Except 050, 060, 120, 150	Normal operation.	
		S Except 050, 060, 120, 150	Normal operation.	
		G Except 050, 060, 120, 150	Normal operation.	
	Short	D-S Except 050, 060, 120, 150	No Hazard.	0[V]
		S-G Except 050, 060, 120, 150	No Hazard.	0[V]
		G-D Except 050, 060, 120, 150	No Hazard.	0[V]
TR603	Short	G-D	No Hazard.	0[V]

ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
TR604	Short	D-S	No Hazard.	0[V]
TR605	Short	G-D	No Hazard.	0[V]
ZD201	Open		Normal operation.	
R102	Open		No Hazard.	0[V]
R206	Open		Normal operation.	
R714	Open		Normal operation.	
R715	Open		Normal operation.	