

## ABNORMAL TEST RESULT

## OF MODEL SFS3024

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 : 2/25 ~ 22/25)

( Abnormal Test Result: 23/25 ~ 25/25)

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	See 23 Page.	
C103	Open	Normal operation	
	Short	See 23 Page.	
C105	Open	Normal operation	
	Short	Normal operation	
C106	Open	Normal operation	
	Short	Normal operation	
C131	Open	Normal operation	
	Short	No Hazard	0[V]
C141	Open	See 23 Page.	
	Short	No Hazard	0[V]
C142	Open	Normal operation	
	Short	See 23 Page.	
C161	Open	Normal operation	
	Short	No Hazard	0[V]
C201	Open	Normal operation	
	Short	Normal operation	
C202	Open	Normal operation	
	Short	No Hazard	0[V]
C203	Open	Normal operation	
	Short	No Hazard	0[V]



F M E A

Component	Mode		Comment	Output Voltage (V)
C205	Open		Normal operation	
	Short		Normal operation	
C206	Open		Normal operation	
	Short		Normal operation	
C251	Open		Normal operation	
	Short		Normal operation	
C252	Open		Normal operation	
	Short		Normal operation	
C253	Open		Normal operation	
	Short		Normal operation	
C255	Open		Normal operation	
	Short		Normal operation	
C301	Open		Normal operation	
	Short		No Hazard	0[V]
C302	Open	Except 1R2	See 23 Page.	
		Only 1R2	Normal operation	
	Short		No Hazard	0[V]
C303	Open		See 23 Page.	
	Short		No Hazard	Decreased
C304	Open		See 23 Page.	
	Short		No Hazard	0[V]
C305	Open		See 23 Page.	
	Short		No Hazard	0[V]
C306	Open		Normal operation	



F M E A

Component	Mode		Comment	Output Voltage (V)
C306	Short		See 23 Page.	
C308	Open		No Hazard	0[V]
	Short		Normal operation	
C309	Open	Only 1R2	Normal operation	
	Short	Only 1R2	No Hazard	0[V]
C342	Open		No Hazard	0[V]
	Short		See 23 Page.	
C353	Open		Normal operation	
	Short		No Hazard	0[V]
C354	Open	Only 1R2 12 15	Normal operation	
	Short	Only 1R2 12 15	Normal operation	
C401	Open		Normal operation	
	Short		No Hazard	Increased
C501	Open		Normal operation	
	Short		No Hazard	0[V]
C502	Open		Normal operation	
	Short		No Hazard	0[V]
C511	Open	Only 05	Normal operation	
	Short	Only 05	Normal operation	
C512	Open	Only 05	Normal operation	
	Short	Only 05	Normal operation	
C601	Open		See 23 Page.	
	Short		Normal operation	
D141	Open		No Hazard	0[V]

F M E A

Component	Mode		Comment	Output Voltage (V)
D141	Short		See 23 Page.	
D161	Open		Normal operation	
	Short		Normal operation	
D251	Open		Normal operation	
	Short		See 23 Page.	
D601	Open		See 23 Page.	
	Short		No Hazard	0[V]
IC101	Open	1	No Hazard	0[V]
		2	No Hazard	0[V]
		3	No Hazard	0[V]
		4	See 23 Page.	
		5	No Hazard	0[V]
		6	No Hazard	0[V]
		7	No Hazard	0[V]
		8	No Hazard	0[V]
	Short	1-2	No Hazard	0[V]
		2-3	No Hazard	0[V]
		3-4	Normal operation	
		5-6	No Hazard	0[V]
		6-7	See 23 Page.	
		7-8	See 23 Page.	
L101	Open		No Hazard	0[V]
	Short		Normal operation	
L102	Open		No Hazard	0[V]



F M E A

Component	Mode		Comment	Output Voltage (V)
L102	Short		Normal operation	
L141	Open		No Hazard	0[V]
	Short		See 23 Page.	
L501	Open		No Hazard	0[V]
	Short		No Hazard	0[V]
SS141	Open	K	No Hazard	0[V]
		A1	No Hazard	0[V]
		A2	No Hazard	0[V]
	Short	A1-A2	No Hazard	0[V]
		K-A1	No Hazard	0[V]
		K-A2	No Hazard	0[V]
SS651	Open	K	No Hazard	0[V]
		A1	No Hazard	0[V]
		A2	Normal operation	
	Short	A1-A2	No Hazard	0[V]
		K-A1	Normal operation	
		K-A2	No Hazard	0[V]
T101	Open	1 or 2	No Hazard	0[V]
		3 or 4	No Hazard	0[V]
		5 or 6 or 7	No Hazard	0[V]
		8 or 9	See 23 Page.	
		10 or 11	No Hazard	0[V]
		12 or 13	No Hazard	0[V]
	Short	1-2	No Hazard	0[V]



F M E A

Component	Mode		Comment	Output Voltage (V)
T101	Short	3-4	No Hazard	0[V]
		5-7 or 6-7	No Hazard	0[V]
		8-9	No Hazard	0[V]
		10-11	No Hazard	0[V]
		12-13	No Hazard	0[V]
TR101	Open	D	See 23 Page.	
		S	See 23 Page.	
		G	See 23 Page.	
	Short	D-S	See 23 Page.	
		S-G	See 23 Page.	
		G-D	See 24 Page.	
TR131	Open	C	Normal operation	
		E	Normal operation	
		B	Normal operation	
	Short	C-E	See 23 Page.	
		E-B	Normal operation	
		B-C	No Hazard	
TR141	Open	D	See 24 Page.	
		S	No Hazard	0[V]
		G	No Hazard	0[V]
	Short	D-S	Normal operation	
		S-G	No Hazard	0[V]
		G-D	Normal operation	
TR142	Open	C	No Hazard	0[V]



F M E A

Component	Mode		Comment	Output Voltage (V)
TR142	Open	E	No Hazard	0[V]
		B	No Hazard	0[V]
	Short	C-E	Normal operation	
		E-B	No Hazard	0[V]
		B-C	See 24 Page.	
TR161	Open	C	No Hazard	0[V]
		E	No Hazard	0[V]
		B	No Hazard	0[V]
	Short	C-E	See 24 Page.	
		E-B	No Hazard	0[V]
		B-C	See 24 Page.	
TR162	Open	C	See 24 Page.	
		E	See 24 Page.	
		B	See 24 Page.	
	Short	C-E	No Hazard	0[V]
		E-B	See 24 Page.	
		B-C	No Hazard	0[V]
TR201	Open	C6	Normal operation	
		E1	No Hazard	0[V]
		B2	No Hazard	0[V]
	Short	C6-E1	Normal operation	
		E1-B2	Normal operation	
		B2-C6	Normal operation	
	Open	C3	Normal operation	





F M E A

Component	Mode		Comment	Output Voltage (V)
TR201	Open	E4	Normal operation	
		B5	Normal operation	
	Short	C3-E4	No Hazard	0[V]
		E4-B5	Normal operation	
		B5-C3	No Hazard	0[V]
	TR202	Open	D6	Normal operation
S1			Normal operation	
G2			Normal operation	
Short		D6-S1	Normal operation	
		S1-G2	Normal operation	
		G2-D6	Normal operation	
Open		D3	Normal operation	
		S4	Normal operation	
		G5	Normal operation	
Short		D3-S4	No Hazard	0[V]
		S4-G5	Normal operation	
		G5-D3	No Hazard	0[V]
TR205	Open	C6	No Hazard	0[V]
		E1	No Hazard	0[V]
		B2	No Hazard	0[V]
	Short	C6-E1	Normal operation	
		E1-B2	No Hazard	0[V]
		B2-C6	Normal operation	
	Open	C3	Normal operation	



F M E A

Component	Mode		Comment	Output Voltage (V)
TR205	Open	E4	Normal operation	
		B5	Normal operation	
	Short	C3-E4	No Hazard	0[V]
		E4-B5	Normal operation	
		B5-C3	No Hazard	0[V]
	TR206	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]
TR251	Open	C6	No Hazard	0[V]
		E1	No Hazard	0[V]
		B2	No Hazard	0[V]
	Short	C6-E1	Normal operation	
		E1-B2	No Hazard	0[V]
		B2-C6	No Hazard	0[V]
	Open	C3	No Hazard	0[V]
		E4	No Hazard	0[V]
		B5	No Hazard	0[V]
	Short	C3-E4	Normal operation	
		E4-B5	No Hazard	0[V]
		B5-C3	Normal operation	
TR252	Open	C6	Normal operation	



F M E A

Component	Mode		Comment	Output Voltage (V)
TR252	Open	E1	Normal operation	
		B2	Normal operation	
	Short	C6-E1	No Hazard	0[V]
		E1-B2	Normal operation	
		B2-C6	No Hazard	0[V]
	Open	C3	Normal operation	
		E4	Normal operation	
		B5	Normal operation	
	Short	C3-E4	No Hazard	0[V]
		E4-B5	Normal operation	
		B5-C3	No Hazard	0[V]
	TR253	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]
TR254	Open	C6	Normal operation	
		E1	Normal operation	
		B2	Normal operation	
	Short	C6-E1	Normal operation	
		E1-B2	Normal operation	
		B2-C6	Normal operation	
	Open	C3	Normal operation	



F M E A

Component	Mode		Comment	Output Voltage (V)	
TR254	Open	E4	Normal operation		
		B5	Normal operation		
	Short	C3-E4	No Hazard	0[V]	
		E4-B5	Normal operation		
		B5-C3	No Hazard	0[V]	
	TR301	Open	C6	Normal operation	
E1			Normal operation		
B2			Normal operation		
Short		C6-E1	No Hazard	0[V]	
		E1-B2	Normal operation		
		B2-C6	No Hazard	0[V]	
Open		C3	Normal operation		
		E4	Normal operation		
		B5	Normal operation		
Short		C3-E4	Normal operation		
		E4-B5	Normal operation		
		B5-C3	Normal operation		
TR302		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]	
TR331	Open	C6	Normal operation		



F M E A

Component	Mode		Comment	Output Voltage (V)
TR331	Open	E1	No Hazard	0[V]
		B2	No Hazard	0[V]
	Short	C6-E1	Normal operation	
		E1-B2	Normal operation	
		B2-C6	Normal operation	
	Open	C3	Normal operation	
		E4	Normal operation	
		B5	Normal operation	
	Short	C3-E4	No Hazard	0[V]
		E4-B5	Normal operation	
		B5-C3	No Hazard	0[V]
	TR341	Open	C	No Hazard
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]
TR351	Open	C6	No Hazard	0[V]
		E1	No Hazard	0[V]
		B2	No Hazard	0[V]
	Short	C6-E1	Normal operation	
		E1-B2	Normal operation	
		B2-C6	See 24 Page.	
	Open	C3	Normal operation	



F M E A

Component	Mode		Comment	Output Voltage (V)
TR351	Open	E4	Normal operation	
		B5	Normal operation	
	Short	C3-E4	No Hazard	0[V]
		E4-B5	No Hazard	0[V]
		B5-C3	Normal operation	
TR352	Open	C6	Normal operation	
		E1	Normal operation	
		B2	Normal operation	
	Short	C6-E1	No Hazard	0[V]
		E1-B2	Normal operation	
		B2-C6	No Hazard	0[V]
	Open	C3	Normal operation	
		E4	Normal operation	
		B5	Normal operation	
	Short	C3-E4	No Hazard	0[V]
		E4-B5	No Hazard	0[V]
		B5-C3	Normal operation	
TR353	Open	C6	Normal operation	
		E1	Normal operation	
		B2	Normal operation	
	Short	C6-E1	Normal operation	
		E1-B2	Normal operation	
		B2-C6	Normal operation	
	Open	C3	Normal operation	



F M E A

Component	Mode		Comment	Output Voltage (V)
TR353	Open	E4	Normal operation	
		B5	Normal operation	
	Short	C3-E4	No Hazard	0[V]
		E4-B5	No Hazard	0[V]
		B5-C3	No Hazard	0[V]
	TR354	Open	C6	Normal operation
E1			No Hazard	0[V]
B2			Normal operation	
Short		C6-E1	See 24 Page.	
		E1-B2	No Hazard	0[V]
		B2-C6	See 24 Page.	
Open		C3	No Hazard	0[V]
		E4	No Hazard	0[V]
		B5	No Hazard	0[V]
Short		C3-E4	See 24 Page.	
		E4-B5	No Hazard	0[V]
		B5-C3	See 24 Page.	
TR401	Open	D	Normal operation	
		S	Normal operation	
		G	Normal operation	
	Short	D-S	Normal operation	
		S-G	No Hazard	0[V]
		G-D	Normal operation	
TR501	Open	D	No Hazard	0[V]



F M E A

Component	Mode		Comment	Output Voltage (V)
TR501	Open	S	No Hazard	0[V]
		G	See 24 Page.	
	Short	D-S	No Hazard	0[V]
		S-G	See 24 Page.	
		G-D	No Hazard	0[V]
	TR502	Open	D	See 24 Page.
S			See 24 Page.	
G			See 24 Page.	
Short		D-S	No Hazard	0[V]
		S-G	See 24 Page.	
		G-D	No Hazard	0[V]
TR601	Open	D6	See 24 Page.	
		S1	See 24 Page.	
		G2	See 24 Page.	
	Short	D6-S1	No Hazard	0[V]
		S1-G2	See 25 Page.	
		G2-D6	See 25 Page.	
	Open	D3	No Hazard	0[V]
		S4	No Hazard	0[V]
		G5	No Hazard	0[V]
	Short	D3-S4	See 25 Page.	
		S4-G5	No Hazard	0[V]
		G5-D3	No Hazard	0[V]
TR602	Open	D	See 25 Page.	





F M E A

Component	Mode		Comment	Output Voltage (V)
TR602	Open	S	See 25 Page.	
		G	Normal operation	
	Short	D-S	See 25 Page.	
		S-G	See 25 Page.	
		G-D	See 25 Page.	
ZD131	Open		See 25 Page.	
	Short		Normal operation	
ZD132	Open		See 25 Page.	
	Short		No Hazard	0[V]
ZD201	Open		No Hazard	0[V]
	Short		Normal operation	
ZD301	Open		Normal operation	
	Short		Normal operation	
ZD351	Open		Normal operation	
	Short		No Hazard	0[V]
ZD601	Open		See 25 Page.	
	Short		See 25 Page.	
ZD602	Open		Normal operation	
	Short		No Hazard	0[V]
ZD603	Open		See 25 Page.	
	Short		See 25 Page.	
R101	Open		No Hazard	0[V]
R102	Open		No Hazard	0[V]
R131	Open		Normal operation	



F M E A

Component	Mode		Comment	Output Voltage (V)
R132	Open		Normal operation	
R133	Open		Normal operation	
R134	Open		Normal operation	
R135	Open		Normal operation	
R137	Open		Normal operation	
R141	Open		Normal operation	
R142	Open		Normal operation	
R143	Open		See 25 Page.	
R145	Open		No Hazard	0[V]
R148	Open		No Hazard	0[V]
R151	Open	Except 1R5 2R5 12	No Hazard	0[V]
R152	Open	Only 1R5 2R5 12	No Hazard	0[V]
R161	Open		No Hazard	0[V]
R162	Open		No Hazard	0[V]
R163	Open		See 25 Page.	
R164	Open		Normal operation	
R165	Open		See 25 Page.	
R166	Open		No Hazard	0[V]
R201	Open		No Hazard	0[V]
R202	Open		No Hazard	0[V]
R203	Open		Normal operation	
R204	Open		Normal operation	
R205	Open		Normal operation	
R206	Open		Normal operation	



F M E A

Component	Mode	Comment	Output Voltage (V)
R210	Open	Normal operation	
R211	Open	No Hazard	0[V]
R212	Open	Normal operation	
R213	Open	Normal operation	
R214	Open	Normal operation	
R215	Open	Normal operation	
R216	Open	Normal operation	
R220	Open	Normal operation	
R221	Open	Normal operation	
R223	Open	Normal operation	
R224	Open	Normal operation	
R251	Open	No Hazard	0[V]
R252	Open	Normal operation	
R253	Open	No Hazard	0[V]
R254	Open	Normal operation	
R255	Open	Normal operation	
R256	Open	Normal operation	
R257	Open	Normal operation	
R258	Open	Normal operation	
R259	Open	Normal operation	
R260	Open	Normal operation	
R261	Open	No Hazard	0[V]
R262	Open	Normal operation	
R263	Open	Normal operation	



F M E A

Component	Mode		Comment	Output Voltage (V)
R264	Open		Normal operation	
R265	Open		Normal operation	
R301	Open		No Hazard	0[V]
R302	Open		No Hazard	0[V]
R303	Open		Normal operation	
R304	Open		See 25 Page.	
R305	Open		Normal operation	
R306	Open		See 25 Page.	
R307	Open		No Hazard	0[V]
R308	Open		See 25 Page.	
R311	Open		No Hazard	0[V]
R312	Open	Only 1R5	No Hazard	0[V]
R313	Open		See 25 Page.	
R314	Open		Normal operation	
R315	Open		Normal operation	
R316	Open		Normal operation	
R317	Open		Normal operation	
R321	Open		No Hazard	0[V]
R331	Open		No Hazard	0[V]
R332	Open		Normal operation	
R333	Open		Normal operation	
R342	Open		Normal operation	
R354	Open		Normal operation	
R355	Open		No Hazard	0[V]

## F M E A

Component	Mode		Comment	Output Voltage (V)
R356	Open		Normal operation	
R358	Open		No Hazard	0[V]
R359	Open		Normal operation	
R360	Open		No Hazard	0[V]
R361	Open		Normal operation	
R362	Open		Normal operation	
R363	Open		No Hazard	0[V]
R364	Open		No Hazard	0[V]
R401	Open		Normal operation	
R402	Open		Normal operation	
R403	Open		Normal operation	
R501	Open		Normal operation	
R502	Open		Normal operation	
R511	Open	Only 05	Normal operation	
R512	Open	Only 05	Normal operation	
R513	Open	Only 05	Normal operation	
R514	Open	Only 05	Normal operation	
R601	Open		See 25 Page.	
R602	Open		See 25 Page.	
R603	Open		Normal operation	
R604	Open		See 25 Page.	
R605	Open		Normal operation	
R606	Open		Normal operation	
R607	Open		Normal operation	



F M E A

Component	Mode	Comment	Output Voltage (V)
R608	Open	Normal operation	
R611	Open	Normal operation	
R650	Open	Normal operation	
R651	Open	Normal operation	

## ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
C102	Short		External fuse opened, No Hazard.	0[V]
C103	Short		External fuse opened, No Hazard.	0[V]
C141	Open		No Hazard.	Decreased
C142	Short		No Hazard.	0[V]
C302	Open		No Hazard.	0[V]
C303	Open		No Hazard.	Decreased
C304	Open		No Hazard.	Decreased
C305	Open		No Hazard.	Decreased
C306	Short		No Hazard.	0[V]
C342	Short		No Hazard.	0[V]
C601	Open		No Hazard.	Decreased
D141	Short		Normal operation.	
D251	Short		No Hazard.	0[V]
D601	Open		No Hazard.	Decreased
IC101	Open	4	No Hazard.	Decreased
	Short	6-7	R101 102 opend, No Hazard.	0[V]
		7-8	R134 opend, No Hazard.	0[V]
L141	Short		No Hazard.	Decreased
T101	Open	8 or 9	No Hazard.	Decreased
TR101	Open	D	No Hazard.	0[V]
		S	No Hazard.	0[V]
		G	R101 102 opend, No Hazard.	0[V]
	Short	D-S	R101 102 opend, No Hazard.	0[V]
		S-G	No Hazard.	0[V]

## ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
TR101	Short	G-D	R101 102 opend, No Hazard.	0[V]
TR131	Short	C-E	No Hazard.	0[V]
		B-C	No Hazard.	0[V]
TR142	Short	B-C	Normal operation.	
TR161	Short	C-E	R101 102 opend, No Hazard.	0[V]
		B-C	R101 102 opend, No Hazard.	0[V]
TR162	Open	C	R101 102 opend, No Hazard.	0[V]
		E	R101 102 opend, No Hazard.	0[V]
		B	R101 102 opend, No Hazard.	0[V]
	Short	E-B	R101 102 opend, No Hazard.	0[V]
TR351	Short	B2-C6	No Hazard.	0[V]
TR354	Short	C6-E1	No Hazard.	0[V]
		B2-C6	No Hazard.	0[V]
		C3-E4	No Hazard.	0[V]
		B5-C3	No Hazard.	0[V]
TR501	Open	G	No Hazard.	Decreased
	Short	S-G	No Hazard.	Decreased
TR502	Open	D	No Hazard.	Decreased
		S	No Hazard.	Decreased
		G	No Hazard.	Decreased
	Short	S-G	No Hazard.	0[V]
TR601	Open	D6	No Hazard.	Decreased
		S1	No Hazard.	Decreased
		G2	No Hazard.	Decreased



## ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
TR601	Short	S1-G2	No Hazard.	Decreased
		G2-D6	No Hazard.	0[V]
		D3-S4	No Hazard.	0[V]
TR602	Open	D	Normal operation.	
		S	Normal operation.	
	Short	D-S	No Hazard.	Decreased
		S-G	No Hazard.	Decreased
		G-D	No Hazard.	Decreased
ZD131	Open	No Hazard.	0[V]	
ZD132	Open	No Hazard.	0[V]	
ZD601	Open	Normal operation.		
	Short	No Hazard.	Decreased	
ZD603	Open	Normal operation.		
	Short	No Hazard.	Decreased	
R143	Open	Normal operation.		
R163	Open	R101 102 opend, No Hazard.	0[V]	
R165	Open	R101 102 opend, No Hazard.	0[V]	
R304	Open	No Hazard.	Decreased	
R306	Open	No Hazard.	Decreased	
R308	Open	No Hazard.	Decreased	
R313	Open	No Hazard.	Decreased	
R601	Open	Normal operation.		
R602	Open	Normal operation.		
R604	Open	No Hazard.	Decreased	