



## ABNORMAL TEST RESULT

OF MODEL TEPS45F/TECS45F

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 : 2/15 ~ 13/15)  
( Abnormal Test Result: 14/15 ~ 15/15)

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.	AVR1:*
	Short	F101 opened, No hazard.	AVR1:0
C111	Open	Output voltage decreased. No hazard.	AVR1:decreased
	Short	F101 opened, No hazard.	AVR1:0
C112	Open	Normal operation.	AVR1:*
	Short	F101 opened, No hazard.	AVR1:0
C201	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C202	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C203	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C204	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C205	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C206	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C212	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased. No hazard.	AVR1:decreased
C311	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C312	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*



## F M E A

Component	Mode	Comment	Output Voltage (V)
C331	Open	No hazard.	AVR1:*
	Short	No Hazard.	AVR1:0
C333 (Only -5)	Open	No hazard.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C351	Open	Normal operation.	AVR1:*
	Short	TR501 opened, No hazard.	AVR1:0
C371	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C411	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C501	Open	Normal operation.	AVR1:*
	Short	F101 opened, No hazard.	AVR1:0
C502	Open	Normal operation.	AVR1:*
	Short	F101 opened, No hazard.	AVR1:0
C503	Open	Normal operation.	AVR1:*
	Short	F101 opened, No hazard.	AVR1:0
C504	Open	Normal operation.	AVR1:*
	Short	F101 opened, No hazard.	AVR1:0
C505	Open	Normal operation.	AVR1:*
	Short	F101 opened, No hazard.	AVR1:0
C506	Open	Normal operation.	AVR1:*
	Short	F101 opened, No hazard.	AVR1:0
C511	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0



## F M E A

Component	Mode	Comment	Output Voltage (V)
C601	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C602	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C603	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C604	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C605	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C606	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C607	Open	Normal operation.	AVR1:*
	Short	No Hazard.	AVR1:0
C611	Open	See page 14.	
	Short	See page 14.	
C641	Open	Normal operation.	AVR1:*
	Short	See page 14.	
C701	Open	See page 14.	
	Short	No Hazard.	AVR1:0
C711	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
C721	Open	No hazard.	AVR1:*
	Short	No hazard.	AVR1:*

## F M E A

Component	Mode	Comment	Output Voltage (V)
C722 (Only -5)	Open	No hazard.	AVR1:*
	Short	No hazard.	AVR1:*
C731	Open	No hazard.	AVR1:*
	Short	No hazard.	AVR1:*
C801	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D201	Open	No Hazard.	AVR1:0
	Short	No Hazard.	AVR1:0
D211	Open	Output voltage decreased.No hazard.	AVR1:decreased
	Short	R211, R215, R217 opened, No hazard.	AVR1:*
D212	Open	No Hazard.	AVR1:0
	Short	Normal operation.	AVR1:*
D411	Open	See page 14.	
	Short	Normal operation.	AVR1:*
D501	Open	Normal operation.	AVR1:*
	Short	TR501 opened, No hazard.	AVR1:0
D511	Open	Normal operation.	AVR1:*
	Short	TR501 opened, No hazard.	AVR1:0
D631	Open	Normal operation.	AVR1:*
	Short	Normal operation.	AVR1:*
D711	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased
D712	Open	Normal operation.	AVR1:*
	Short	Output voltage decreased.No hazard.	AVR1:decreased

## F M E A

Component	Mode		Comment	Output Voltage (V)
IC301	Open	1	Normal operation.	AVR1:*
		2	Normal operation.	AVR1:*
		3	No Hazard.	AVR1:0
		4	Output voltage decreased.No hazard.	AVR1:decreased
		5	TR501 opened, No hazard.	AVR1:0
		6	No Hazard.	AVR1:0
		7	No Hazard.	AVR1:0
		8	No Hazard.	AVR1:0
		10	No Hazard.	AVR1:0
	Short	1-2	See page 14.	
		2-3	See page 14.	
		3-4	No Hazard.	AVR1:0
		4-5	No Hazard.	AVR1:0
		6-7	No Hazard.	AVR1:0
		7-8	F101 opened, No hazard.	AVR1:0
		8-10	IC301, C201~C208 opened, No hazard.	AVR1:0
IC601	Open	1	See page 14.	
		2	See page 14.	
		3	See page 14.	
		4	See page 14.	
		5	See page 14.	
		6	See page 14.	
	Short	1-2	See page 14.	
		2-3	See page 14.	

## F M E A

Component	Mode		Comment	Output Voltage (V)
IC601	Short	4-5	See page 14.	
		5-6	No Hazard.	AVR1:0
IC701	Open	1	No Hazard.	AVR1:0
		2	No Hazard.	AVR1:0
		3	No Hazard.	AVR1:0
	Short	1-3	No Hazard.	AVR1:0
IC702	Open	1	Normal operation.	AVR1:*
		2	Normal operation.	AVR1:*
		3	Normal operation.	AVR1:*
	Short	1-3	No Hazard.	AVR1:0
L101	Open	1	No Hazard.	AVR1:0
		2	No Hazard.	AVR1:0
		3	No Hazard.	AVR1:0
		4	No Hazard.	AVR1:0
	Short	1-2	Normal operation.	AVR1:*
		1-3	F101 opened, No hazard.	AVR1:0
		3-4	Normal operation.	AVR1:*
		2-4	F101 opened, No hazard.	AVR1:0
L111	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
L201	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
L501	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*

## F M E A

Component	Mode		Comment	Output Voltage (V)
L701	Open		L702, L703 opened, No hazard.	AVR1:0
	Short		See page 14.	
L702	Open		Normal operation.	AVR1:*
	Short		See page 14.	
L703	Open		Normal operation.	AVR1:*
	Short		See page 14.	
PC101	Open	A, K	No Hazard.	AVR1:0
		C, E	No Hazard.	AVR1:0
	Short	A-K	No Hazard.	AVR1:0
		C-E	No Hazard.	AVR1:0
PC102	Open	A, K	Normal operation.	AVR1:*
		C, E	Normal operation.	AVR1:*
	Short	A-K	Normal operation.	AVR1:*
		C-E	No Hazard.	AVR1:0
PTH42 1	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
R101	Open		Normal operation.	AVR1:*
R102	Open		Normal operation.	AVR1:*
R103	Open		Normal operation.	AVR1:*
R104	Open		Normal operation.	AVR1:*
R105	Open		Normal operation.	AVR1:*
R211	Open		Output voltage decreased.No hazard.	AVR1:decreased
R212	Open		Normal operation.	AVR1:*
R213	Open		Normal operation.	AVR1:*

## F M E A

Component	Mode	Comment	Output Voltage (V)
R214	Open	Normal operation.	AVR1:*
R215	Open	Normal operation.	AVR1:*
R216	Open	No Hazard.	AVR1:0
R217	Open	Normal operation.	AVR1:*
R301	Open	No Hazard.	AVR1:0
R311	Open	Normal operation.	AVR1:*
R315	Open	Normal operation.	AVR1:*
R316	Open	Normal operation.	AVR1:*
R317	Open	Normal operation.	AVR1:*
R318	Open	No Hazard.	AVR1:0
R321	Open	Normal operation.	AVR1:*
R331 (Only -5)	Open	No hazard.	AVR1:*
R351	Open	TR501 opened, No hazard.	AVR1:0
R352	Open	Normal operation.	AVR1:*
R353 (Only -5)	Open	Normal operation.	AVR1:*
R371	Open	No Hazard.	AVR1:0
R411	Open	No Hazard.	AVR1:0
R412	Open	See page 14.	
R413	Open	No Hazard.	AVR1:0
R414	Open	Normal operation.	AVR1:*
R501	Open	IC301 opened, No hazard.	AVR1:0
R511	Open	Normal operation.	AVR1:*
R512 (Only -12)	Open	Normal operation.	AVR1:*
R611	Open	See page 14.	



## F M E A

Component	Mode	Comment	Output Voltage (V)
R623 (Only -24)	Open	Normal operation.	AVR1:*
R624 (Except:-24)	Open	Normal operation.	AVR1:*
R631	Open	See page 14.	
R632	Open	See page 14.	
R633	Open	Normal operation.	AVR1:*
R641	Open	See page 14.	
R651	Open	See page 15.	
R671	Open	See page 15.	
R672 (Except:-24)	Open	See page 15.	
R701	Open	Normal operation.	AVR1:*
R702	Open	Normal operation.	AVR1:*
R703	Open	Normal operation.	AVR1:*
R704	Open	Normal operation.	AVR1:*
R705	Open	Normal operation.	AVR1:*
R711	Open	No Hazard.	AVR1:0
R712	Open	No Hazard.	AVR1:0
R713	Open	Output voltage decreased.No hazard.	AVR1:decreased
R715	Open	No Hazard.	AVR1:0
R716	Open	Normal operation.	AVR1:*
R717	Open	Normal operation.	AVR1:*
R721	Open	No Hazard.	AVR1:0
R723	Open	No hazard.	AVR1:*
R731	Open	No hazard.	AVR1:*
R741	Open	See page 15.	

## F M E A

Component	Mode		Comment	Output Voltage (V)
R742	Open		See page 15.	
R751	Open		Normal operation.	AVR1:*
R752	Open		No Hazard.	AVR1:0
R761	Open		Normal operation.	AVR1:*
R762 (Only -24)	Open		Normal operation.	AVR1:*
R763	Open		See page 15.	
SS101	Open	1	No Hazard.	AVR1:0
		2	No Hazard.	AVR1:0
		3	No Hazard.	AVR1:0
		4	No Hazard.	AVR1:0
	Short	1-2	F101 opened, No hazard.	AVR1:0
		3-4	F101 opened, No hazard.	AVR1:0
SS611	Open		See page 15.	
	Short		See page 15.	
T101	Open	1	No Hazard.	AVR1:0
		2	No Hazard.	AVR1:0
		3	No Hazard.	AVR1:0
		4	No Hazard.	AVR1:0
		5	No Hazard.	AVR1:0
		6	No Hazard.	AVR1:0
		7	No Hazard.	AVR1:0
		8	No Hazard.	AVR1:0
	Short	1-2	No Hazard.	AVR1:0
		2-3	C201~C208, R211, TR311, C311 opened, No hazard.	AVR1:0

## F M E A

Component	Mode		Comment	Output Voltage (V)
T101	Short	4-5	No Hazard.	AVR1:0
		6-7	Normal operation.	AVR1:*
		7-8	No Hazard.	AVR1:0
TH101	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
TR311	Open	C	Normal operation.	AVR1:*
		E	Normal operation.	AVR1:*
		B	Normal operation.	AVR1:*
	Short	C-E	No Hazard.	AVR1:0
		E-B	Normal operation.	AVR1:*
		B-C	No Hazard.	AVR1:0
TR411	Open	C	See page 15.	
		E	No Hazard.	AVR1:0
		B	No Hazard.	AVR1:0
	Short	C-E	Normal operation.	AVR1:*
		E-B	Normal operation.	AVR1:*
		B-C	Normal operation.	AVR1:*
TR501	Open	D	No Hazard.	AVR1:0
		S	No Hazard.	AVR1:0
		G	No Hazard.	AVR1:0
	Short	D-S	See page 15.	
		S-G	No Hazard.	AVR1:0
		G-D	See page 15.	
TR601	Open	D	No Hazard.	AVR1:0



F M E A

Component	Mode		Comment	Output Voltage (V)
TR601	Open	S	No Hazard.	AVR1:0
		G	See page 15.	
	Short	D-S	No Hazard.	AVR1:0
		S-G	See page 15.	
		G-D	See page 15.	
ZD211	Open		No Hazard.	AVR1:0
	Short		Normal operation.	AVR1:*
ZD411	Open		Normal operation.	AVR1:*
	Short		No Hazard.	AVR1:0

## ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
C611	Open		No Hazard.	AVR1:0
	Short		R611 opened, No hazard.	AVR1:0
C641	Short		No Hazard.	AVR1:0
C701	Open		Normal operation.	AVR1:*
D411	Open		TR501 opened, No hazard.	AVR1:0
IC301	Short	1-2	Normal operation.	AVR1:*
		2-3	Normal operation.	AVR1:*
IC601	Open	1	No Hazard.	AVR1:0
		2	No Hazard.	AVR1:0
		3	No Hazard.	AVR1:0
		4	No Hazard.	AVR1:0
		5	No Hazard.	AVR1:0
		6	No Hazard.	AVR1:0
	Short	1-2	No Hazard.	AVR1:0
		2-3	No Hazard.	AVR1:0
		4-5	Normal operation.	AVR1:*
L701	Short		Normal operation.	AVR1:*
L702	Short		Normal operation.	AVR1:*
L703	Short		Normal operation.	AVR1:*
R412	Open		No Hazard.	AVR1:0
R611	Open		No Hazard.	AVR1:0
R631	Open		No Hazard.	AVR1:0
R632	Open		No Hazard.	AVR1:0
R641	Open		No Hazard.	AVR1:0



## ABNORMAL TEST RESULT

Component	Mode		Comment	Output Voltage (V)
R651	Open		No Hazard.	AVR1:0
R671	Open		No Hazard.	AVR1:0
R672	Open		No Hazard.	AVR1:0
R741	Open		Normal operation.	AVR1:*
R742	Open		Normal operation.	AVR1:*
R763	Open		Normal operation.	AVR1:*
SS611	Open		No Hazard.	AVR1:0
	Short		R611 opened, No hazard.	AVR1:0
TR411	Open	C	No Hazard.	AVR1:0
TR501	Short	D-S	F101 opened, No hazard.	AVR1:0
		G-D	F101 opened, No hazard.	AVR1:0
TR601	Open	G	No Hazard.	AVR1:0
	Short	S-G	No Hazard.	AVR1:0
		G-D	No Hazard.	AVR1:0