Fax Modem Socket

1. INTRODUCTION

1.1. Purpose

Testing was performed on the TE Fax Modem Socket to determine its conformance to the requirements of TE Product Specification 108-57083 Rev.A.

1.2. Scope

This report covers the electrical, mechanical, and environmental performance of the Fax Modem Socket manufactured by the Global Personal Computer Division.

1.3. Conclusion

Fax Modem Socket, listed in paragraph 1.5., meets the electrical, mechanical, and environmental performance requirements of TE Product Specification 108-57083 Rev A.

1.4. Product Description

The TE Fax Modem Socket on the motherboard PCB is used to connect to Fax Modem Card. The contacts are copper alloy, gold plated on the contact interface and soldertail, all over nickel plating. The housing material is glass filled insulating polymer, UL94V-0.

1.5. Test Samples

The test samples were randomly selected from normal current production lots,

Test Group	Quantity	Description
A,B,C,D,E,F,G,H	4 ea.	Fax Modem Socket

1.6. Qualification Test Sequence

Test or Examination	Test Group (a)							
	A	B	C	D	E	F	G	H
Examination of Product	1,9	1,5	1,5	1,5	1,5	1,3	1,3	1,3
Termination Resistance, Dry Circuit	2,6	2,4	2,4	2,4	2,4			
Insulation Resistance	3,7							
Dielectric Withstand Voltage	4,8							
Humidity	5							
Salt Spray		3						
Temperature Life			3					
Resistance to solder heat				3				
Durability					3			
PC Board Mating Force						2		
Contact Retention Force							2	
Solderability								2

NOTE: (a) The numbers indicate sequence in which tests were performed.

2. TEST RESULT

GP	TEST	SPEC.	DATA				Judgment
			Mean	σ	Max.	Min.	
1	TR (Initial)	30mΩ max.	22.2	0.918	24.0	20.4	ACCEPTED
	IR (Initial)	500MΩ min.	-	-	-	100000	ACCEPTED
	DWV (Initial)	250V/1min	-	-	OK	OK	ACCEPTED
	TR (Final)	ΔR 20mΩ max.	1.2	0.875	4.3	-0.3	ACCEPTED
	IR (Final)	100MΩ min.	-	-	-	100000	ACCEPTED
	DWV (Final)	250V/1min	-	-	OK	OK	ACCEPTED
	APPEARANCE	NO DAMAGE	-	-	OK	OK	ACCEPTED
2	TR (Initial)	30mΩ max.	21.6	1.116	23.5	19.8	ACCEPTED
	TR (Final)	ΔR 20mΩ max.	0.5	0.595	2.1	-0.8	ACCEPTED
	APPEARANCE	NO DAMAGE	-	-	OK	OK	ACCEPTED
3	TR (Initial)	30mΩ max.	21.1	1.417	24.4	18.5	ACCEPTED
	TR (Final)	ΔR 20mΩ max.	0.8	1.060	4.5	-1.8	ACCEPTED
	APPEARANCE	NO DAMAGE	-	-	OK	OK	ACCEPTED
4	TR (Initial)	30mΩ max.	21.5	2.196	24.4	15.0	ACCEPTED
	TR (Final)	ΔR 20mΩ max.	1.0	1.030	4.9	-1.0	ACCEPTED
	APPEARANCE	NO DAMAGE	-	-	OK	OK	ACCEPTED
5	TR (Initial)	30mΩ max.	21.6	1.994	25.9	18.1	ACCEPTED
	TR (Final)	ΔR 20mΩ max.	1.1	0.829	4.0	-0.2	ACCEPTED
	APPEARANCE	NO DAMAGE	-	-	OK	OK	ACCEPTED
6	P.C. BOARD MATING FORCE	5.3kgf max.	0.73	0.071	0.82	0.65	ACCEPTED
	APPEARANCE	NO DAMAGE	-	-	OK	OK	ACCEPTED
7	CONTACT RETENTION FORCE	180gf min.	412	80.261	575	250	ACCEPTED
	APPEARANCE	NO DAMAGE	-	-	OK	OK	ACCEPTED
8	SOLDERABILITY	95% min.	-	-	-	95%	ACCEPTED
	APPEARANCE	NO DAMAGE	-	-	OK	OK	ACCEPTED