

Connector, Economy F Series, RF Coaxial, PCB**1. INTRODUCTION**

1.1. Purpose

| Testing was performed on Tyco Electronics F Series Economy PCB Mounted Connector to determine
| its conformance to the requirements of Product Specification 108-1755 Rev. O.

1.2. Scope

This report covers the electrical and mechanical performance of the F Series Economy PCB Mounted Connector manufactured by the Consumer Products Business Unit. The testing was performed between 04Apr97 and 25Jun97.

1.3. Conclusion

| The F Series Economy PCB Mounted Connector, listed in paragraph 1.5., met the electrical and
| mechanical performance requirements of Product Specification 108-1755 Rev O.

1.4. Product Description

| The F Series Economy PCB mounted connectors are general purpose 75 ohm connectors designed to
| be soldered to printed circuit boards.

1.5. Test Samples

The test samples were representative of normal production lots, and the following part numbers were used for test:

	<u>Test Group</u>	<u>Quantity</u>	<u>Part Nbr</u>	<u>Description</u>
	1	5 ea.	415276-1	Jack, R/A, PCB, F Series
	1	5 ea.	415024-1	Jack, R/A, PCB, F Series
	1	10 ea.	415018-1	Plug, Sealed F Crimp, Series 6

1.6. Qualification Test Sequence

Test or Examination	Test Groups
	1
	Test Sequence
Examination of Product	1,7
Termination Resistance, Dry Circuit	2,6
I Vibration	4
Mechanical Shock	5
Durability	3

NOTE *The numbers indicate sequence in which tests were performed.*

2. SUMMARY OF TESTING

I 2.1. Examination of Product

All samples submitted for testing were representative of normal production lots. A Certificate of Conformance was issued by the Product Assurance Department of the Consumer Products Business Unit. Where specified, samples were visually examined and no evidence of physical damage detrimental to product performance was observed.

I 2.2. Termination Resistance

A continuity check was taken using a test current of 100 milliamperes. All samples maintain continuity before and after testing.

I 2.3. Vibration

No discontinuities were detected during vibration. Following vibration, no cracks, breaks, or loose parts on the connector assemblies were visible.

I 2.4. Mechanical Shock

No discontinuities were detected during physical shock. Following physical shock testing, no cracks, breaks, or loose parts on the connector assemblies were visible.

I 2.5. Durability

No physical damage occurred to the samples as a result of mating and unmating the connector 10 times.

3. TEST METHODS

3.1. Examination of Product

Where specified, samples were visually examined for evidence of physical damage detrimental to product performance.

3.2. Termination Resistance

Continuity checks were made using a 2 terminal measuring technique. The test current was maintained at 100 milliamperes maximum.(Figure 1)

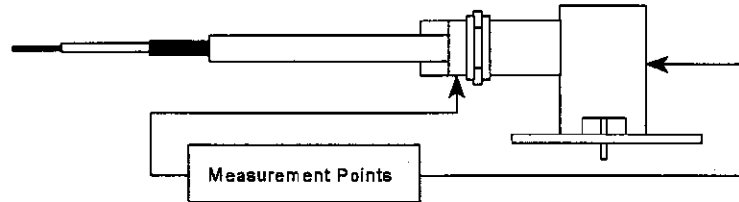


Figure 1
Continuity Measurement Points

I 3.3. Vibration, Sine

Mated connectors were subjected to sinusoidal vibration, having a simple harmonic motion with an amplitude of 0.06 inch, double amplitude. The vibration frequency was varied uniformly between the limits of 10 and 55 Hz and returned to 10 Hz in 1 minute. This cycle was performed 120 times in each of 3 mutually perpendicular planes for a total vibration time of 6 hours. Connectors were monitored for discontinuities of 1 microsecond or greater using a current of 100 milliamperes DC.

I 3.4. Mechanical Shock

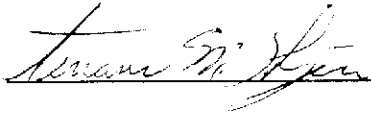
Mated connectors were subjected to a physical shock test having a half-sine waveform of 50 gravity units (g peak) and a duration of 11 milliseconds. Three shocks in each direction were applied along the 3 mutually perpendicular planes for a total of 18 shocks. Connectors were monitored for discontinuities of 1 microsecond or greater using a current of 100 milliamperes DC.

I 3.5. Durability

Connectors were mated and unmated 10 times at a rate of 600 cycles per hour.

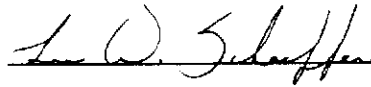
4. **VALIDATION**

Prepared by:

 2/19/98

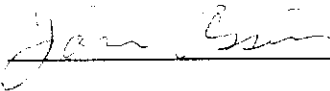
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