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## 1.0 SCOPE.


- 1.1 Content. This specification covers the performance requirements for EON Press Fit Quickie family of compliant, press-fit daughter board post headers.
- 1.2 Qualification. When tests are performed on the subject product line, the procedures specified in the applicable specifications must be used. All inspections shall be performed using the applicable inspection plans and product drawings.

## 2.0 APPLICABLE DOCUMENTS


- 2.1 Specifications.
  - (a) General requirements from test specification.
  - (b) Engineering drawings
  - (c) Process drawings
- 2.2 Military Standards.
  - (a) MIL-STD-105: Sampling procedure and tables for inspection by attributes.
  - (b) MIL-STD-1344: Test methods from electrical connectors
  - (c) MIL-STD-202:
- 2.3 Commercial Standards.
  - (a) UL94-V0

## 3.0 REQUIREMENTS.

- 3.1 Design and construction. Connectors shall be of the design, construction, and physical dimensions specified on the applicable product drawing.
- 3.2 Materials.
  - A. Contacts. Copper Alloy, nickel plate all-over or duplex plate of gold, GXT, Tin or Tin-Lead as required by the product drawing.
  - B. Thermoplastic, UL94-V-0
- 3.3 Performance and Test Description Header assemblies shall be designed to meet the electrical, mechanical, and environmental performance requirements specified in Section 3.4.
- 3.4 Test Requirements and Procedure Summary.

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TEST DESCRIPTION	REQUIREMENT	PROCEDURE
Examination of product.	Meets requirements of product drawing.	Visual, dimensional and functional per QAP
Contact to plated through hole resistance	1.0 Milliohms max. init. 4.0 Milliohms max. final	Test as shown in Figure 1
Insulation Resistance	5000 Mégohms min. init. 1000 Mégohms min. final	Method 3003 of MIL-STD-1344
Dielectric Withstanding Voltage (DWV)	No arcover or insulation breakdown or current leakage greater than 1 Milliamp.	Method 3001 condition 1 of MIL-STD-1344 test voltage 1000 VRMS, 60 cycles per second duration 60 seconds
Bend Strength	No damage to wire-wrap pin	Tested on a circuit board-connector assembly in accordance with method 211 MIL-STD-202 test method C: load of one (1) pound and a maximum bend of 30°, each side of the center line.
Torque Strength	1) No damage to wire-wrap terminals 2) Meets the final contact to plated through hole resistance	Tested to method 211, MIL-STD202 test condition E with 2 ½ ounce inches of torque
Pin to board Retention	Three (3) pound min.	Pull or push individual pin at a rate of 0.1 inches per minute and measure force required to move pin
Pin to housing Retention	Three (3) pound min.	Pull or push individual pin at a rate of 0.1 inches per minute and measure force required to move pin
Pin Stability	No visible motion of the board interface	Pins assembled to a PCB shall experience a motion of 30° magnitude in any radial direction at either end of the pin
Thermal Shock	1) No evidence of crazing, cracking or other damage to the assembly	Test to method 1003 of MIL-STD-1344. For connectors to be used in higher than 85° C environment, test to MIL-STD-202 Method 107 Condition.
Humidity	1) Meets the insulation resistance final min value. 2) Meets the final contact to plated through hole resistance.	Test to method 1002 of MIL-STD-1344 Type 1, test condition B (96 HOURS AT 40° C and 95% RH)


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Vibration	1) No physical or mechanical damage. 2) No discontinuity greater than 1 Microsecond. 3) Meets the final contact to plated through hole resistance.	Mate connector assembly with test Board and test to method 2005, MIL-STD-1344 test condition III.
Shock	1) No physical or mechanical damage. 2) No physical or mechanical damage. 3) Meets the final contact to plated through hole resistance.	Test to method 2004, MIL-STD-1344, test three blows in each direction along each of three mutually perpendicular axes-total of 18 shocks.
Solvent Resistance	No evidence of swelling, cracking, crazing, dimensional change or entrapment of foreign matter that would effect connector function	Connector assemblies cleaned in a vapor degreaser using Freon™ TF for 30 seconds (10 seconds at peak temperature).

### 3.5 Test Sequence.

- a) See Paragraph 4.1.A
- b) Numbers indicate sequence in which tests are performed.

TEST DESCRIPTION	TEST GROUP (a)			
	1	2	3	4
	TEST SEQUENCE (b)			
Examination of product	1	1	1	1
Contact to Plated though Hole	2, 4, 6			2,5
Insulation Resistance			2,6	
Bend Strength		2		
Torque Strength		3		
Board Retention	7	5		
Housing Retention			3	
DWV		6		
Pin Stability		4		
Thermal Shock	3		4	
Humidity	5		5	
Vibration				3
Shock				4
Solvent Resistance		7		

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#### 4.0 QUALITY ASSURANCE PROVISIONS.

##### 4.1 Qualification Inspection.

- A. Sample Selection. Connector housings and contacts shall be prepared in accordance with applicable instruction sheets. They shall be selected at random from current production. Each group shall consist of three connector assemblies. Where individual readings are specified, only 15 random readings shall be taken per test group.
- B. Test Sequence. Qualification inspection shall be verified by testing samples as specified in Section 3.5

##### 4.2 Acceptance.

- 4.2.1 Acceptance Inspection. Acceptance inspection shall be consistent with 4.2.3 below.
- 4.2.2 Inspection Lot. An inspection lot shall consist of all connectors produced under essentially the same and offered for inspection at one time.
- 4.2.3 Sampling Plan. A) Statistical sampling and inspection shall be performed for General Inspection; B) FCI is committed to a Zero Defect Philosophy utilizing Statistical Process Control. Our commitment to Zero Defects is a continuous improvement in process quality.
- 4.2.4 Rejected Lots. Rejected lots shall be reworked to correct the defects or screened to remove defective units and re-submitted for inspection.
- 4.2.5 Disposition of Sample Units. Sample units that have been subjected to the acceptance inspection shall be considered deliverable on the contract or purchase order.



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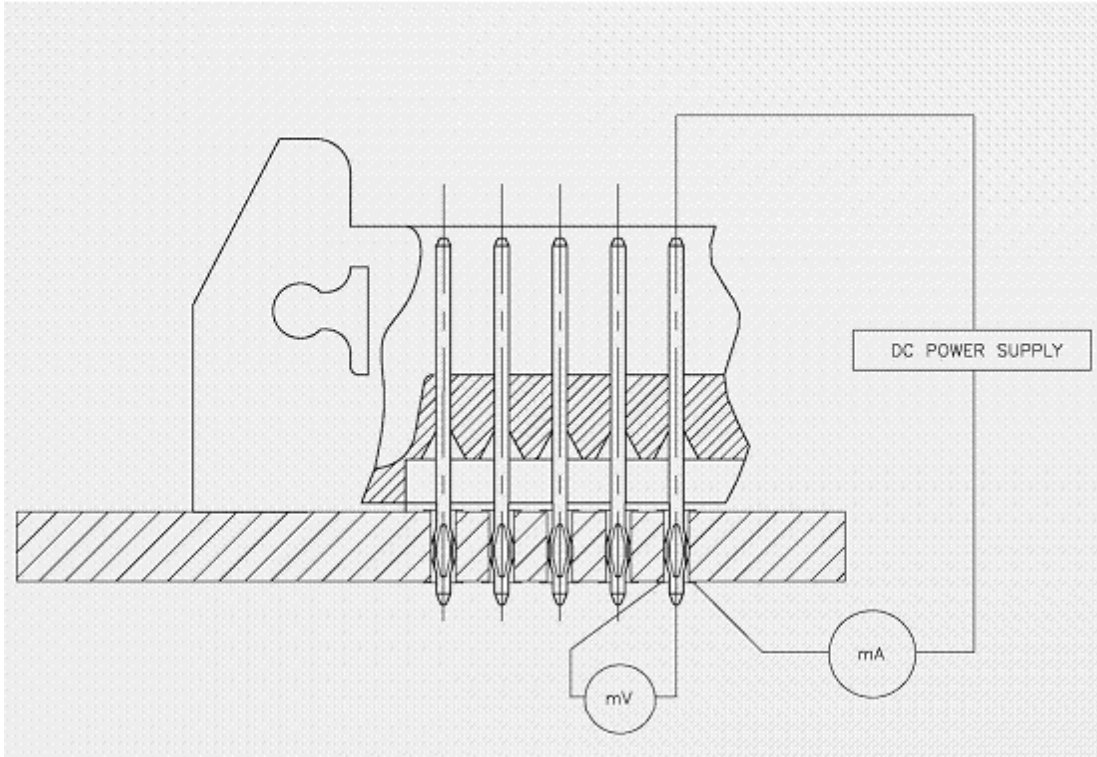
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**FIGURE 1 – CONTACT TO PLATED THROUGH HOLE RESISTANCE**

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A	All	New document	M06-0368	September 21, 2006



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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