PRODUCT SPECIFICATION

1. SCOPE

1.1. Content

This specification covers the performance requirements for the PIDG* and PLASTI-GRIP* FASTON* terminals. FASTON terminal is a receptacle of various sizes which offer a wide range of use in the appliance and automotive industries. Sizes are designated numerically to correspond to the width of the mating tab and include 250, 205, 187, and 110 series.

1.2. Qualification

When tests are performed on the subject product line, the procedures specified in AMP 109 series specifications shall be used. All inspections shall be performed using the applicable inspection plan and product drawing.

2. APPLICABLE DOCUMENTS

The following documents form a part of this specification to the extent specified herein. In the event of conflict between the requirements of this specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of this specification and the referenced documents, this specification shall take precedence.

2.1. AMP Specifications

A. 109-1: General Requirements
B. 109 Series: Test Specifications as indicated in Figure 1. (Comply with MIL-STD-202, MIL-STD-1344 and EIA RS-364)
C. 114-1002: Terminal, FASTON, PIDG, Application of
D. 114-1003: Terminal, FASTON, PLASTI-GRIP, Application of

2.2. Commercial Standard

UL 486: Standard, Wire Connectors and Soldering Lugs

3. REQUIREMENTS

3.1. Design and Construction

Terminals shall be of the design, construction and physical dimensions specified on the applicable product drawing.

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LTR	REVISION RECORD	APP	DATE

DR Fred Reinhardt 5/16/80
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APP A E Traub 5/20/80

AMP | AMP INCORPORATED Harrisburg, Pa.

LOC B | A | NO 108-1033 | REV 0

NAME: TERMINAL, FASTON, PIDG AND PLASTI-GRIP

DIST 01

AMP 1250-13 REV 7-78

3.2. Materials

A. Receptacle: Brass or phosphor bronze, pre tin
B. Sleeve, plastic: PVC or nylon
C. Sleeve, metallic: Copper (PIDG FASTON only)

3.3. Performance and Test Description

Terminals shall be designed to meet the electrical, mechanical and environmental performance requirements specified in Figure 1.

3.4. Test Requirements and Procedures Summary

Test Description	Requirement	Procedure
Examination of Product	Meets requirements of product drawing and AMP Spec 114-1002 and 114-1003.	Visual, dimensional and functional per applicable inspection plan.
ELECTRICAL		
Dielectric Withstanding Voltage	No breakdown or flash-over when 2.2 kvac is applied for 1 minute	Test properly wired and insulated terminal in number 12 lead shot; UL 486, Para 9.6.
MECHANICAL		
Crimp Tensile	Wire shall not become separated from terminal when tested as specified	Subject terminal to one minute, direct pull, at force specified; UL 486 Para 8.

Wire Size, AWG	Force, pounds
22	10
20	16
18	20
16	30
14	60
12	70
10	80

Figure 1

3.5. Connector Tests and Sequences

Test or Examination	Test Group (a)	
	1	2
	Test Sequence (b)	
Examination of Product	1	
Dielectric Withstanding Voltage		1
Crimp Tensile		2

(a) See Para 4.1.A.
(b) Numbers indicate sequence in which tests are performed.

Figure 2

4. QUALITY ASSURANCE PROVISIONS

4.1. Qualification Testing

A. Sample Selection

Terminals shall be prepared in accordance with applicable Instruction Sheets. They shall be selected at random from current production. Test group 1 shall consist of 1 terminal of each size, representative of the entire lot being tested. Test group 2 shall consist of 15 terminals for each wire size, terminal size and terminal type. All terminals shall be crimped to appropriate PN 103501 and 103502 tin plated test conductors in accordance with AMP Specification 114-1002 and 114-1003.

B. Test Sequence

Qualification inspection shall be verified by testing samples as specified in Figure 2.

C. Acceptance

(1) Requirements put on test samples, as indicated in the requirements portion of Figure 1, exist as either the upper or lower statistical tolerance limit (95% confidence, 99% reliability). All samples tested in accordance with this specification shall meet the stated tolerance limit.

(2) Failures attributed to equipment, test setup, or operator deficiencies shall not disqualify the product. When product failure occurs, corrective action shall be taken and samples resubmitted for qualification

4.2. Quality Conformance Inspection

The applicable AMP inspection plan will specify the sampling acceptable quality level to be used. Dimensional and functional requirements shall be in accordance with the applicable product drawing and this specification.