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MIL-T-55155C 12 May 1993

SUPERSEDING MIL-T-55155B 26 September 1988

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MILITARY SPECIFICATION

TERMINALS, FEEDTHRU (INSULATED) AND TERMINALS, STUD (INSULATED AND NONINSULATED)

GENERAL SPECIFICATION FOR

This specification is approved for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 <u>Scope</u>. This specification covers insulated feedthru terminals and insulated and noninsulated stud terminals.

1.2 <u>Part or identifying number (PIN)</u>. Items procured under this specification shall be identified by the following specification based part number:

M55155/03	ę	H	<u>01</u> 1
Specification/ Specification sheet identifier (see 1.2.1)	Insulation color (see 1.2.2)	Conductor material and finish (see 1.2.3)	Item number (see 1.2.4)

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving the document should be addressed to Director, US Army Research Lab, ATTN: AMSRL-EP-RD, Fort Monmouth, NJ 07703-5601 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A 1 of 17 FSC 5940 <u>DISTRIBUTION STATEMENT A.</u> Approved for public release; distribution is unlimited. 1.2.1 <u>Specification/specification sheet identifier</u>. The part number specification/specification sheet identifier shall consist of the letter "M", the digits of the specification number "55155", a slash /, and a two-digit numeral which denotes the slash number of the specification sheet covering the item being identified. When the slash number is less than 10, the first digit shall be a zero. Example: M55155/03 is the specification/specification sheet identifier for this specification and for specification sheet MIL-T-55155/3.

1.2.2 <u>Insulation color</u>. The insulation color is identified by a single digit in accordance with table I. For noninsulated terminals or natural color (other than polytetrafluoroethylene) insulated terminals, the letter "X" shall be used in place of the single digit.

Symbol	Insulation color
0	Black Brown Red
3	Orange Yellow Green
6	Blue Violet Grav
9	Gray White (natural polytetrafluoroethylene)

TABLE I - Insulation color.

1.2.3 <u>Conductor material and finish</u>. The conductor material and finish is identified by a single letter (see 3.3.1.1). For example, "H" defines a brass terminal, tin-lead plated in accordance with MIL-P-81728, 0.0003 inch minimum thickness.

1.2.4 <u>Item number</u>. The item number is identified by a two-digit number. When the item number is less than 10, the first digit shall be a zero (see 3.1).

2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 <u>Specifications, standards</u>. The following specifications and standards form a part of the specification to the extent specified herein. Unless otherwise specified, the issues of these documents shall be those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation.

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SPECIFICATIONS

FEDERAL

QQ-N-290 QQ-S-571	 Nickel Plating (Electrodeposited). Solder: Tin Alloy; Lead-Tin Alloy; and Lead Alloy.
MILITARY	
MIL-1-10	- Insulating Compound, Electrical, Ceramic, Class L.
MIL-M-14	- Molding Compounds, Thermosetting.
MIL-T-10727	- Tin Plating, Electrodeposited or Hot- Dipped, for Ferrous and Nonferrous Metals.
MIL-E-17555	 Electronic and Electrical Equipment, Accessories, and Provisioned Items (Repair Parts); Packaging of.
MIL-P-81728	- Plating, Tin Lead (Electrodeposited).

STANDARDS

FEDERAL

FED-STD-H28	+	Screw	Thread	Standards	for	Federal	Service.
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MILITARY

MIL-STD-104	- Limits for Electrical Insulation Color.
MIL-STD-129	- Marking for Shipment and Storage.
MIL-STD-202	- Test Methods for Electronic and Electrical Parts.
MIL-STD-454	- Standard General Requirements for Electronic Equipment.
MS35333	- Washer, Lock, Flat-Internal Tooth.
MIL-STD-45662	- Calibration System Requirements.

Downloaded from http://www.everyspec.com MIL-T-55155C

(Unless otherwise indicated, copies of federal and military specifications and standards are available from the Defense Printing Service Detachment Office, Standardization Documents Order Desk, Building 4D, Code NPM-2, 700 Robbins Avenue, Philadelphia, PA 19111-5094).

2.2 <u>Non-Government publications</u>. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DoDISS specified in the solicitation. Unless otherwise specified, the issues of documents not listed in the DoDISS are the issues of the documents cited in the solicitation.

AMERICAN SOCIETY FOR TESTING AND MATERIALS

ASTM	B16	-	Free-cutting Brass Rod, Bar and Shapes for Use in Screw Machines.
ASTM	B121	-	Leaded Brass Plate, Sheet, Strip, and Rolled Bar.
ASTM	B139		Rod, Bar, and Shapes, Phosphor Bronze.
ASTM	B140	-	Copper-Zinc-Lead (Leaded Red Brass or Hardware
			Bronze) Rod, Bars, and Shapes.
ASTM	D1457	-	PTFE Molding and Extension Materials.
ASTM	D1710	-	TFE - Fluorocarbon Rod.
ASTM	D3951	-	Packaging, Commercial.
ASTM	E384	-	Microhardness of Materials.

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103).

2.3 Order of precedence. In the event of a conflict between the text of this specification and the references cited herein (except for associated detail specification, specification sheets or MS standards), the text of this specification shall take precedence. Nothing in this specification, however, shall supersede applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 <u>Specification sheets</u>. The individual item requirements shall be as specified herein and in accordance with the applicable specification sheet. In the event of any conflict between requirements of this specification and the specification sheet, the latter shall govern.

3.2 <u>Material</u>. The material shall be as specified herein. However, when a definite material is not specified, a material shall be used which shall enable the terminals to meet the performance requirements of this specification. Acceptance or approval of any constituent material shall not be construed as a guarantee of the acceptance of

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the finished product. Materials used in the construction of terminals shall be fungus inert and shall meet Requirement 4 of MIL-STD-454.

3.2.1 Insulation material (see J.1).

3.2.1.1 <u>Polytetrafluoroethylene</u>. Polytetrafluoroethylene shall conform to ASTM D1457 or ASTM D1710.

3.2.1.2 <u>Ceramic</u>. Ceramic shall conform to grade 411 or better of MIL-I-10.

3.2.1.3 <u>Diallyl phthalate</u>. Diallyl phthalate shall conform to type SDG-F or GDI-30F of MIL-M-14.

3.2.2 Conductor material (see 6.3).

3.2.2.1 <u>Bronze</u>. When specified (see 1.2) bronze shall conform to alloy no. C53400 or C54400 of ASTM B139.

3.2.2.2 <u>Brass</u>. When specified (see 1.2) brass shall conform to alloy no. C36000 of ASTM B16 or alloy no. C34200 or C35300 of ASTM B121 or alloy C31400 of ASTM B140.

3.3 <u>Design and construction</u>. Terminals shall be of the design, construction, and physical dimensions specified (see 3.1).

3.3.1 Insulated terminals.

3.3.1.1. <u>Conductor material and finish</u>. The conductor material and finish shall be in accordance with one of the following (see 1.2.3 and 6.1). When so constructed and finished, the terminals shall meet the solderability requirements of 3.5.

3.3.1.1.1 <u>Bronze (see 3.2.2.1)</u>. The conductor material shall be bronze and finished with one of the following. Copper underplate is not required.

- B Tin-lead plated in accordance with MIL-P-81728, 0.0003 inch minimum thickness.
- C Hot solder dipped using Sn60 solder per QQ-S-571, 0.0001 inch minimum thickness.
- D Tin-lead electrodeposited in accordance with MIL-T-10727, 0.0003 inch minimum thickness. The minimum lead content shall be 3 percent.

3.3.1.1.2 <u>Brass (see 3.2.2.2)</u>. The conductor material shall be brass and finished with one of the following. Copper underplate of 0.0001 inch minimum thickness is required.

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- H Tin-lead plated in accordance with MIL-P-81728, 0.0003 inch minimum thickness.
- I Hot solder dipped using Sn60 solder per QQ-S-571, 0.0001 inch minimum thickness.
- J Tin-lead electrodeposited in accordance with MIL-T-10727, 0.0003 inch minimum thickness. The minimum lead content shall be 3 percent.

3.3.1.2 <u>Mounting bases</u>. Mounting bases shall be constructed of brass and shall be plated with one of the following finishes:

- (a) Tin-lead plated, 0.0001 inch minimum thickness provided that the minimum lead content is 3 percent.
- (b) Nickel plated in accordance with <u>QQ-N-290</u>, class I or II, 0.0001 inch minimum thickness.

3.3.1.3 <u>Insulation colors</u>. Insulation colors shall conform to MIL-STD-104. Slight color variations due to pigment formulation are allowed.

3.3.2 <u>Noninsulated terminals</u>. Noninsulated terminals shall be constructed and finished the same as the conductor (see 3.3.1.1).

3.3.3 <u>Mounting hardware</u>. Mounting hardware shall be plated with either of the finishes used for the mounting base (see 3.3.1.2). Lock washers shall conform to MS35333 as specified (see 3.1). Mounting hardware shall be supplied with the terminals.

3.3.4 <u>Threaded parts</u>. Threaded parts shall be in accordance with FED-STD-H28 and shall be as specified (see 3.1).

3.4 <u>Hardness</u>. Terminals to be installed by swaging, flaring or upsetting shall be suitably annealed to accept this operation without fracturing.

3.4.1 <u>Bronze</u>. When terminals are tested as specified in 4.6.2 the hardness range shall be HK 75 to 105.

3.4.2 Brass. When terminals are tested as specified in 4.6.2 the hardness range shall be HK 80 to 107.

3.5 <u>Solderability</u>. When terminals are tested as specified in 4:6.3, the conductor shall conform to the lug and tab termination criteria of method 208 of MIL-STD-202.

3.6 <u>Thermal shock</u>. When insulated terminals are tested as specified in 4.6.4, there shall be no evidence of loosening, cracking, or shrinkage of insulation.

3.7 <u>Moisture resistance</u>. When insulated terminals are tested as specified in 4.6.5, there shall be no evidence of cracking, breaking, or loosening of parts.

3.8 <u>Insulation resistance</u>. When insulated terminals are tested as specified in 4.6.6, the insulation resistance shall be not less than 1,000 megohms.

3.9 <u>Vibration, high frequency</u>. When insulated terminals are tested as specified in 4.6.7, there shall be no evidence of cracking, breaking, or loosening of parts, and the dielectric withstanding voltage shall be as specified in 3.12.

3.10 <u>Pull</u>. When insulated terminals are tested as specified in 4.6.8, the conductor shall not separate from the insulation or mounting base by more than 0.005 inch, the terminals shall not pull out of the mounting, and there shall be no other mechanical damage.

3.11 <u>Torque</u>. When insulated terminals are tested as specified in 4.6.9, the conductor shall not turn within the insulation of mounting base, the terminals shall not turn within the mounting, and there shall be no mechanical damage.

3.12 <u>Salt spray (corrosion)</u>. When insulated terminals are tested as specified in 4.6.10, there shall be no exposure of base metal or blistering of plated surfaces.

3.13 <u>Dielectric withstanding voltage</u>. When insulated terminals are tested as specified in 4.6.11, there shall be no evidence of damage, arcing, or breakdown.

3.14 <u>Workmanship</u>. Terminals shall be processed in such a manner as to be uniform in quality and shall be free from any defects that will affect life, serviceability, or appearance.

4. QUALITY ASSURANCE PROVISIONS

4.1 <u>Responsibility for inspection</u>. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

4.1.1 <u>Responsibility for compliance</u>. All items must meet all requirements of sections 3 and 5. The inspection set forth in this specification shall become a part of the contractor's overall

inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of assuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling in quality conformance does not authorize submission of known defective materials, either indicated or actual, nor does it commit the Government to acceptance of defective material.

4.1.2 <u>Test equipment and inspection facilities</u>. Test and measuring equipment and inspection facilities of sufficient accuracy, quality and quantity to permit performance of the required inspection shall be established and maintained by the supplier. The establishment and maintenance of a calibration system to control the accuracy of the measuring and test equipment shall be in accordance with MIL-STD-45662.

4.2 <u>Classification of inspection</u>. The inspections specified herein shall be classified as follows:

- (a) Materials inspection (see 4.3)
- (b) Quality conformance inspection (see 4.5)

4.3 <u>Materials inspection</u>. Materials inspection shall consist of certification supported by verifying data that the materials listed in table II, used in fabricating the terminals, are in accordance with the applicable referenced specifications prior to such fabrication.

Material	Requirement paragraph	Applicable specification
Polytetraflouro- ethylene	3.2.1.1	ASTM D1457 or ASTM D1710
Ceramic	3.2.1.2	MIL-I-10
Diallyl Phthalate	3.2.1.3	MIL-M-14
Bronze	3.2.2.1	ASTM B139
Brass	3.2.2.2	ASTM B140, ASTM B16 or
		ASTM B121
Tin-lead plate	3.3.1.1	MIL-P-81728
Solder dip	3.3.1.1	QQ-S-571
Tin plate	3.3.1.2	MIL-T-10727
Nickel plate	3.3.1.2	QQ-N-290

TABLE II - Materials inspection.

4.4 <u>Inspection conditions</u>. Unless otherwise specified herein, all inspections shall be performed in accordance with test conditions specified in the "GENERAL REQUIREMENTS" of MIL-STD-202.

4.5 Quality conformance inspection.

4.5.1 <u>Inspection of product for delivery</u>. Inspection of product for delivery shall consist of group A inspection.

4.5.2 <u>Inspection lot</u>. An inspection lot shall consist of all terminals of the same part number, produced under essentially the same conditions, and offered for inspection at one time (see 6.4).

4.5.2.1 <u>Group A inspection</u>. Group A inspection shall consist of the examinations and test specified in table III, in the order shown.

4.5.2.1.1 <u>Subgroup I</u>. Subgroup I tests shall be performed on an inspection lot basis. A sample of parts shall be selected in accordance with table IV. If one or more defects is found (for other than the mounting diameter of compression mounted insulated terminals) the lot shall be rejected.

4.5.2.1.1.1 <u>Rejected lots</u>. If an inspection lot (see 6.4.1) is rejected, the supplier may rework it to correct the defects, or screen out the defective units and resubmit for reinspection. Failed lots shall be 100% rescreened and all defective units removed.

4.5.2.1.2 <u>Subgroups II and III</u>. Thirteen samples shall be selected randomly for both subgroups II and III from every inspection lot and subjected to the tests of subgroups II and III. The manufacturer may use rejects from the subgroup I tests for all or part of the samples to be used. If there are one or more defects, the lot shall be rejected.

4.5.2.1.2.1 <u>Rejected lots</u>. If an inspection lot is rejected, the supplier may rework it to correct the defects, or screen out the defective units, and resubmit to that test that produced the failure. If any of the second set of 13 samples fail the test, the lot shall be rejected and shall not be delivered to this specification.

4.5.2.1.2.2 <u>Disposition of sample units</u>. Sample units which have been subjected to the solderability test of group A inspection shall not be delivered on the contract or purchase order.

Examination	Requirement paragraph	Method paragraph
<u>Subgroup I</u> Visual and mech- anical examin- ation (except hardness)	3.2 to 3.3.3 incl, and 3.14	4.6.1
Dielectric with- standing voltage	3.13	4.6.11
<u>Subgroup II</u> Solderability	3.5	4.6.3
<u>Subgroup III</u> Hardness	3.4	4.6.2

TABLE III - Group A inspection.

TABLE IV. Group A sampling plan.

Lot size	Sample size	Allowable defects for mounting diameter of compression mounted insulated terminals (only)
2 to 13	100 percent	1
14 to 150	13	1 1
151 to 280	20	1
281 to 500	29	2
501 to 1,200	34	2
1,201 to 3,200	42	2
3,201 to 10,000	50	2
10,001 to 35,000	60	2.
35,001 to 150,000	74	3
150,001 to 500,000	90	3
500,001 and over	102	3

4.5.2.2 <u>Periodic inspection</u>. Periodic inspection shall consist of group B inspection. Except where the results of this inspection show noncompliance with the applicable requirements (see 4.5.2.2.1.3), delivery of products which have passed group A inspection shall not be delayed pending the results of the periodic inspection.

4.5.2.2.1 <u>Group B inspection</u>. Group B inspection shall consist of the tests specified in table V, in the order shown. Group B inspection shall be made on sample units selected from inspection lots which have passed group A inspection. Group B inspection shall be performed every six months.

4.5.2.2.1.1 <u>Sampling plan</u>. Two samples of each style shall be selected each month. One shall be the smallest and the other shall be the largest of each style produced during that month.

4.5.2.2.1.2 <u>Disposition of sample units</u>. Sample units which have been subjected to group B inspection shall not be delivered on the contract or purchase order.

Test	Requirement paragraph	Method paragraph
Thermal shock	3.6	4.6.4
Moisture resistance	3.7	4.6.5
Insulation resistance	3.8	4.6.6
Vibration, high frequency	3.9	4.6.7
Pull	3.10	4.6.8
Torque	3.11	4.6.9
Salt Spray (corrosion)	3.12	4.6.10
Dielectric withstanding voltage	3.13	4.6.11

TABLE V - Group B inspection.

4.5.2.2.1.3 Noncompliance. If a sample fails to pass group B inspection, the manufacturer shall notify the preparing activity of this document (Army - ER) and the cognizant inspection activity of such failure and take corrective action on the materials or processes, or both, as warranted, and on all units of product which can be corrected and which were manufactured during that time period. Acceptance and shipment of the product shall be discontinued until corrective action, acceptable to the preparing activity, has been taken. After the corrective action has been taken, group B inspection shall be repeated on additional sample units (all test and examinations, or the test which the original sample failed, at the option of the preparing activity). Group A inspection may be reinstated; however, final acceptance and shipment shall be withheld until the group B inspection has shown that the corrective action was successful. In the event of failure after reinspection, information concerning the failure shall be furnished to the cognizant inspection activity and the preparing activity.

4.6 Methods of examination and test.

4.6.1 <u>Visual and mechanical examination</u>. Terminals shall be examined to verify that the design, construction, physical dimensions, and workmanship are in accordance with the applicable requirements (see 3.2 to 3.3.3 inclusive, and 3.14).

4.6.2 <u>Hardness (see 3.4.1 and 3.4.2)</u>. Hardness shall be tested by Knoop microhardness per ASTM E384 using a 300 gram load on a cross section of the area to be swaged in the transverse direction (see Figure 1).

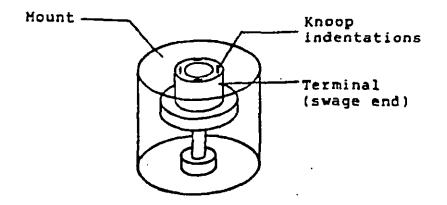


Figure 1 - Knoop microhardness test setup.

4.6.3 <u>Solderability (see 3.5)</u>. The conductor of the terminals shall be tested in accordance with method 208 of MIL-STD-202.

4.6.4 <u>Thermal shock (see 3.6)</u>. Insulated terminals shall be tested in accordance with method 107 of MIL-STD-202. The following details and exceptions shall apply:

- (a) Measurements before cycling Not applicable.
- (b) Special mounting Compression-mounted terminals shall be mounted in the specified test mounting (see 3.1); other terminals shall be mounted by their normal mounting means.
- (c) Test condition letter C.
- (d) Examinations after cycling Terminals shall be visually examined for evidence of cracking and shrinkage of the insulation.

4.6.5 <u>Moisture resistance (see 3.7)</u>. Insulated terminals shall be tested in accordance with method 106 of MIL-STD-202. The following details and exceptions shall apply:

- (a) Mounting Compression-mounted terminals shall be mounted in the specified test mounting (see 3.1); other terminals shall be mounted by their normal mounting means.
- (b) Initial measurement Not applicable.
- (c) Subcycle (steps 7a and 7b) Not applicable.
- (d) Polarization and load Not applicable.
- (e) Final examinations Following step 6 of the final cycle, terminals shall be maintained at a temperature of 25±2°C and relative humidity of 50+5 percent for a period of 4 to 24 hours, after which they shall be visually examined for evidence of cracking, breaking, or loosening of parts. The insulation resistance test (see 3.8) shall be performed immediately upon completion of this test.

4.6.6 <u>Insulation resistance (see 3.8)</u>. Insulated terminals shall be tested in accordance with method 302 of MIL-STD-202. The following details shall apply:

- (a) Test condition letter B.
- (b) Special preparations or conditions Compression-mounted terminals shall be securely mounted in the specified test mounting (see 3.1); other terminals shall be mounted by their normal mounting means.
- (c) Points of measurement Between the conductor accommodations, when applicable, and between the conductor accommodation(s) and the specified test mounting (see 3.1) or the metal mounting base.

4.6.7 <u>Vibration, high frequency (see 3.9)</u>. Insulated terminals shall be tested in accordance with method 204 of MIL-STD-202. The following details and exceptions shall apply:

- (a) Mounting of specimens Compression-mounted terminals shall be securely mounted in the specified test mounting (see 3.1); other terminals shall be mounted by their normal mounting means. The terminals shall then be suitably mounted on the vibration platform.
- (b) Test condition letter D.

- (c) Motion In each of the two mutually perpendicular directions, one perpendicular and the other parallel to the longitudinal axis of the terminal.
- (d) Examination and measurements Terminals shall be visually examined for evidence of cracking, breaking, and loosening of parts. The dielectric withstanding voltage shall then be measured as specified in 4.6.11.

4.6.8 <u>Pull (see 3.10)</u>. Compression-mounted terminals shall be securely mounted in the specified test mounting (see 3.1); other insulated terminals shall be mounted by their normal mounting means. The specified pull (see 3.1) shall then be applied directly to the conductor accommodations in a direction parallel to the longitudinal axis of the terminal for at least 30 seconds. The conductor accommodations shall then be examined for separation from the insulation or mounting base, and the terminals shall be examined for pulling out of the mounting and for other mechanical damage.

4.6.9 <u>Torque (see 3.11)</u>. Compression-mounted terminals shall be securely mounted in the specified test mounting (see 3.1); other insulated terminals shall be mounted by their normal mounting means. The specified torque (see 3.1) shall then be applied between the conductor accommodations and the mounting. The conductor accommodations shall then be examined for turning within the insulation or mounting base, and the terminals shall be examined for turning within the mounting and for mechanical damage.

4.6.10 <u>Salt spray (corrosion) (see 3.12)</u>. Insulated terminals shall be tested in accordance with method 101 of MIL-STD-202. The following details shall apply:

- (a) Test condition letter B.
- (b) Examinations after exposure Terminals shall be visually examined for exposure of base metal and blistering of plated surfaces.

4.6.11 Dielectric withstanding voltage (see 3.13).

4.6.11.1 <u>At atmospheric pressure</u>. Insulated terminals shall be tested in accordance with method 301 of MIL-STD-202. The following details and exceptions shall apply:

- (a) Special preparations or conditions Compression-mounted terminals shall be securely mounted in the specified test mounting (see 3.1); other terminals shall be mounted by their normal mounting means.
- (b) Magnitude and nature of test voltage As specified (see 3.1).

- (c) Rate of application 100 volts per second.
- (d) Duration of application of test voltage 1 minute ±5 seconds.
- (e) Points of application of test voltage Between the conductor accommodations, when applicable, and between the conductor accommodation(s) and the specified test mounting (see 3.1) or the metal mounting base.
- (f) Examinations during and after test Terminals shall be observed for evidence of damage, arcing, and breakdown.

4.6.11.2 <u>At reduced barometric pressure</u>. Insulated terminals shall be tested in accordance with method 105 of MIL-STD-202. The following details shall apply:

- (a) Special preparations or conditions Compression-mounted terminals shall be securely mounted in the specified test mounting (see 3.1); other terminals shall be mounted by their normal mounting means.
- (b) Test condition letter B.
- (c) Examinations during and after subjection to reduced pressure - As specified in 4.6.11.1(f).

5. PACKAGING

5.1 <u>Packaging requirements</u>. The requirements for packaging shall be in accordance with MIL-E-17555.

5.2 <u>Commercial/industrial</u>. Commercial/industrial requirement for preservation, packaging and packing, if specified in the contract or order, shall be in accordance with the requirements of ASTM D3951.

5.3 <u>Marking</u>. Unless otherwise specified (see 6.2), marking shall be in accordance with MIL-STD-129.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Ordering data. Procurement documents should specify the following:

- (a) Title, number, and date of this specification.
- (b) Title, number, and date of the applicable specification sheet and the complete part number (see 1.2 and 3.1).

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6.2 <u>Selection information</u>. Equipment designers should refer to MIL-STD-1277, "Splices, Clips, Terminals, Terminal Boards, Binding Posts: Electrical," for a selection of standard terminal types preferred for use in new equipment design.

6.3 <u>Material selection</u>. Because of its high zinc content, brass should not be selected when long storage periods or resoldering operations may be expected.

6.4 <u>Definitions</u>.

6.4.1 <u>Inspection lot</u>. An inspection lot shall consist of all terminals of the same style from the same production line or lines, produced under essentially the same conditions and offered for inspection during a single work week. The inspection lot size shall be governed by the smallest grouping of the parts that were treated as a lot. For example: if a manufacturing lot consists of 100,000 pieces and that lot is separated into two equal lots for process A and then separated into five equal lots for process B, the inspection lot shall be considered 20,000 pieces.

6.5 <u>Application notes</u>. After swaging, the flange shall be free of circumferential splits or cracks, but may have a maximum of three radial splits or cracks provided that the splits or cracks are separated by at least 90 degrees and do not extend beyond the rolled area of the terminal.

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6.6 Subject term (key word) listing.

Brass Bronze Ceramic Diallyl Phthalate Feedthru Insulated Noninsulatead Polytetrafluoroethylene Stud Terminal 6.7 <u>Changes from previous issue</u>. Asterisks or vertical lines are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

Custodian: Army - ER Navy - EC Air Force - 85 Review activities: Army - MI, AR, AV Air Force - 11, B0 DLA - GS (Project 5940-1141) User activities: Army - AT, ME Navy - AS, MC, SH

INSTRUCTIONS

- 1 The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
- 2. The submitter of this form must complete blocks 4, 5, 6, and 7.
- 3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

I RECOMMEND A CHANGE	1. DOCUMENT NUMBER	2. DOCUMENT DATE (YYMMDD)
I RECOMMEND ACCHANGE:	MIL-T-55155C	930512 ·

DOCUMENT TITLE

Terminals, Feedthru (Insulated) and Terminals, Stud (Insulated and Noninsulated) NATURE OF CHANGE (Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)

REASON FOR RECOMMENDATION

L'SURMITTER IN MARTINE STATISTICS AND	In the second
	dia TELEPHONE (Include Ansa Code) TELE ZOATE SUBAITTED SIT
I. PREPARING ACTIVITY	
NAME US Army Research Laboratory Electronics and Power Sources Directorate	b. TELEPHONE (Include Area Code) (1) Commercial (908) 544-3148 995-3148
ATIN: AMSRL-EP-RD Fort Monmouth, NJ 07703-5601	IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT: Defense Quality and Standardization Office S203 Leesburg Pike, Suite 1403, Falls Church, VA 22041-3466 Telephone (703) 756-2340 AUTOVON 289-2340