MIL-STD-200

8 April 1953

Superseding Armed Services Preferred List of Electron Tubes, 28 January 1953

MILITARY STANDARD

ELECTRON TUBES



UNITED STATES GOVERNMENT PRINTING OFFICE WASHINGTON: 1953

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DEPARTMENT OF DEFENSE DEFENSE SUPPLY MANAGEMENT AGENCY OFFICE OF STANDARDIZATION WASHINGTON 25, D. C.

Electron Tubes MIL-STD-200

8 April 1953

1. This standard has been approved by the Departments of the Army, the Navy, and the Air Force, and is published as a means of establishing a list of electron tubes for use in the design and manufacture of new electrical and electronic equipments under the jurisdiction of the Departments. Exceptions to this are noted in the definition of "new equipments."

2. The Office of Standardization approved this standard for printing and inclusion in the MIL series of standards on 8 April 1953.

3. In accordance with established procedure, the Office of Standardization has designated the Signal Corps, Bureau of Ships, and Air Force as custodians of this standard.

4. This standard is mandatory for use effective 8 April 1953, for the selection of tubes for use in the design of new electrical and electronic equipments. This standard is in no way intended to hamper or restrict development work in the field of electron tubes and electron-tube applications. In the event it is desired to use a tube not included in this standard in the design of new equipments for the Services, specific approval of the Service concerned must be obtained. The activity shall be responsible for making known its recommendations in the matter to the Office of Standardization, Defense Supply Management Agency through the appropriate Departmental custodian.

5. Recommended corrections, additions, or deletions should be addressed to the Office of Standardization, Defense Supply Management Agency, Washington 25, D. C.

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MIL-STD-200 8 April 1953

Superseding Armed Services Preferred List of Electron Tubes, 28 January 1953

1. INTRODUCTION

1.1 SCOPE.—This standard consists of a list of electron tubes types selected jointly by the Departments of the Army, the Navy, and the Air Force. The purpose of this list is to—

(a) Guide Military-equipment designers and manufacturers in the choice of tube types that represent the highest-quality tubes available for Military use, and

(b) Provide for a minimum tube maintenance stock by making extensive use of a minimum number of tube types.

2. DEFINITIONS

2.1 NEW EQUIPMENTS.—The following statements are explanatory in nature and are not intended to be all-inclusive.

2.1.1 The term "new equipments" includes—

- (a) Equipments basically new in electrical design, with no similar prototype.
- (b) Equipments having a similar prototype but completely redesigned as to electrical characteristics.
- (c) New test equipment for operational field use.

2.1.2 The term "new equipments" does not include—

- (a) Equipments, either basically new or redesigned, that are likely to be manufactured in very small quantities, such as laboratory measuring instruments.
- (b) Equipments that are solely mechanical redesigns of existing prototypes.
- (c) Equipments that are reorders without change of existing prototypes.
- (d) Equipments in the design stage before the effective date of adoption of this standard.

3. LIST OF STANDARD ELECTRON TUBES

3.1 Receiving tubes.

| Fila- ment Voltage | Diodes | | Diode Triodes | Twin Triodes | Pentodes | | Mixers | Power Output | | | Tun- ing | 1 |
|-------------------------------|--|--|------------------|--|--------------------------------|--|---------------------------------------|--|--|-----------------|-------------|-------------------------|
| | | Triodes | | | Remote | Sharp | and Converte rs | Pe | ntodes | Triodes | Indi- | Rectifiers |
| 1.25 and 1.4 | †1A3 | | | †3A5 | | †*1AD4 *1AH4 | | †3B4 †*5672 †*6088 | | †*5676 | | †1B3GT †1Z2 |
| 5.0 | | | | | | | | | | | | ‡5R4WGY ‡5Y3WGT. |
| 6.3 | 2B22 †*5647 5726/6AL5W †*5896 | †2C40 ‡6C4W †6J4 *5703WA †*5718 †*5719 *5744WA | | *6BF7 †12AT7 †5670 5751 5814 | 68K7W †5749/6BA6W †*5899 | †6AH6 †6AU6 †5654/6AK5W 5693 *5702WA †*5840 | †5725/6AS6W †5750/6BE6W *5784WA | †2E30 6AG7 †6AK6 6BG6G ‡6L6WGB †*5639 | 5686 †5763 †*5902 5932 ‡6005/6AQ5W | †6AS7G †5687 | †6E5 | ‡6X4W †*5641 5852 |
| 26-Volt Anode Operation | | | 26C6 | | ά. | | | 26A7GT | | | | |
| 26.5 | *5903 | | <u></u> | | | | | 26E6WG | | - | | 26Z5W 5839 |

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3.2 Transmitting tubes.

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| | Tetrodes | Twin Tetrodes | Pulse Modulation | Magnetrons | | Rectifiers | | | | Clipper | Gas switching | | |
|--|---|------------------|---|---|--------------------------------------|---|---|--------------------------------------|--|----------------------|--|--------------------------------------|--|
| Triodes | | | | | | Vacuum | Gaa | _ | Grid Control | Tubes | AT | R | TR |
| 2C39A 811 2C43 880 100TH 5667 250TH 5794 450TL | †4D21 †4–65A †4X150A †5D22 5933 | †829B †832A | †3C45 †3D21A †3E29 †4C35 †4PR60A †5C22 6C21 | 2J30-34 2J51 2J61A-62A 4J50 4J52 4J54-59 | 4J78 5J26 5586 5607 5657 | †2X2A 3B24WA 371B 836 1616 †8020 | OZ4A/1003 †3B28 †4B26 †4B32 6C 16B | 857B 869B 1005 1006 5517 | †C1K 884 †5684/C3J/A †5685/C6J 5696 ‡5727/2D21W | 3B29 4B31 719A | 1B35A 1B36 1B37A 1B44 1B51 1B52 | 1B53 1B56 1B57 5792 5793 | 1B23 1B26 1B27 1B50 1B58 1B63 5853 |

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^{co} 3.3 Miscellaneous tubes.

| C | | Crystals | | Electrometers | Klystroms | | Phototubes | hototubes Voltage regulator | |
|--|---|------------------------|--------------------------------|----------------------|------------------|--|--|---|--|
| 2BP1 3JP(1, 7, 12) 3RP1 5CP(1A, 7A, 12) | 5FP(7A, 14) 5JP1A 5RP(7A, 11A) 5SP(1, 7) | 7MP7 10KP7 12SP7 | 1N21B 1N23B 1N25 1N26 | 1N31 1N69 1N81 | †*5800 †*5886 | 2K22 2K25 2K26 2K28 2K29 2K41 | 2K45 2K54 2K55 6BL6 726 A,B,C, | 1P21 1P30 1P37 1P39 1P40 927 | †OA2 †OA3 †OB2 <u>*5644</u> †5651 *5783 |

* Subminiature type.

Note.-Specifications for these tubes are included in Specification MIL-E-1B

† Also U. S. tubes on NATO priority list of electronic tubes (valves).

‡ NATO priority lists contains these types without the additional U.S. military requirements.

4. NUMERICAL LISTING OF STANDARD TUBE TYPES

| OA2 | 2K28 | 6AS7G | 5647 |
|-------------------|--------------|--------------|------------|
| OA3 | 2K29 | 6AU6 | 5651 |
| OB2 | 2K41 | 6AV6 | 5654/6AK5W |
| OZ4A/1003 | 2K45 | 6BF7 | 5657 |
| C1K | 2K54 | 6BG6G | 5667 |
| 1A3 | 2K55 | 6BL6 | 5670 |
| 1AD4 | 2X2A | 6C | 5672 |
| 1AH4 | 3A5 | 6C4W | 5676 |
| 1B3GT | 3B4 | 6C21 | 5684/C3J/A |
| 1B23 | 3B24WA | 6E5 | 5685/C6J |
| 1B26 | 3B28 | 6J4 | 5686 |
| 1B27 | 3B29 | 6L66WGB | 5687 |
| 1B35A | 3C45 | 6SK7W | 5693 |
| 1B36 | 3D21A | 6X4W | 5696 |
| 1B37A | 3E29 | 7MP7 | 5702WA |
| 1B44 | 3JP1 | 10KP7 | 5703WA |
| 1B50 | 3JP7 | 12AT7 | 5718 |
| 1B51 | 3JP12 | 12SP7 | 5719 |
| 1B52 | 3RP1 | 16B | 5725/6AS6W |
| 1B53 | 4-65A | 26A7GT | 5726/6AL5W |
| 1B56 | 4B26 | 26C6 | 5727/2D21W |
| 1B57 | 4B31 | 26E6WG | 5744WA |
| 1B58 | 4B32 | 26Z5W | 5749/6BA6W |
| 1B63A | 4C35 | 100TH | 5750/6BE6W |
| 1N21B | 4D21 | 250TH | 5751 |
| 1N23B | 4J50 | 371B | 5763 |
| 1N25 | 4J52 | 450TL | 5783 |
| 1N26 | 4J54-59 | 719A | 5784WA |
| 1N31 | 4J78 | 726A | 5792 |
| 1N69 | 4PR60A | 726B | 5793 |
| 1N81 | 4X150A | 726C | 5794 |
| 1P21 | 5C22 | 811 | 5800 |
| 1P30 | 5CP1A | 829B | 5814 |
| 1P37 | 5CP7A | 832A | 5839 |
| 1P39 | 5CP12 | 836 | 5840 |
| 1P40 | 5D22 | 857B | 5852 |
| 1Z2 | 5FP7A | 869B | 5853 |
| 2B22 | 5FP14 | 880 | 5886 |
| 2BP1 | 5J26 | 884 | 5896 |
| 2C39A | 5JP1A | 927 | 5899 |
| 2C40 | 5R4WGY | 1005 | 5902 |
| 2C43 | 5RP7A | 1006 | 5903 |
| 2E30 | 5RP11A | 1616 | 5932 |
| 2J30-34 | 5SP1 | 5517 | 5933 |
| 2J51 | 5SP7 | 5586 | 6005/6AQ5W |
| 2551 2661A-62A | 5Y3WGTA | 5607 | 6088 |
| 2661A-62A 2K22 | 6AG7 | 5639 | 8020 |
| 2K22 2K25 | 6AH6 | 5639 5641 | 0020 |
| 2K25 2K26 | 6AH6 6AK6 | 5641 5644 | |
| 2120 | OALO | 0044 | |

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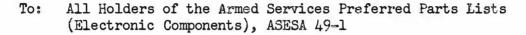
ARMED SERVICES ELECTRO STANDARDS AGENCY

FORT MONMOUTH. N. J.

IN REPLY, ADDRESS NOT THE SIGNER OF THIS LETTER. BUT THE DIRECTOR: DIR/APS-461.1145

Serial #53-466

6 July 1953



Subj: MIL-STD-200, Transmittal of

Encl: (A) MIL-STD-200

Enclosed is a copy of MIL-STD-200, Military Standard Electron 1. Tubes, dated 8 April 1953. This publication supersedes the Armed Services Preferred List of Electron Tubes, dated 28 January 1953 and PPL-1A formerly contained in the ASESA 49-1 publication.

Attention is called to the following typographical errors in 2. enclosure (A):

- (a) Page 2 In the diodes column 5726/6AL5W should be preceded by a dagger.
- (b) Page 4 In first column 261A-62A should be 2J61A-62A.
- (c) Page 4 In third column 6L66WGB should be 6L6WGB.
- (d) Page 5 Under "Other Interest:" Navy-AMCdOrS should be Navy-AMCMdOrS.

Additional copies of enclosure (A) may be obtained as shown on 3. page 5 of the standard.

C. L. D. ALLEN CDR, USN DEPUTY DIRECTOR

