

INCH-POUND
MIL-PRF-1/191E
14 March 2013
SUPERSEDING
MIL- PRF-1/191D
20 March 2007

PERFORMANCE SPECIFICATION SHEET

ELECTRON TUBE, RECEIVING

TYPE 6B4G 1/

Inactive for new design
after 21 July 1997

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

The requirements for acquiring the electron tube described herein
shall consist of this document and the latest issue of MIL-PRF-1.

DESCRIPTION: Triode, power amplifier.

- Outline --- 16-3 (EIA), 12-15 (EIA).
- Base --- B8-11 (phenolic), B8-110 (phenolic) or B8-118 (phenolic).
- Envelope --- ST16, T-12.
- Cathode --- Coated filament.

Base connections:

PIN No.	---	1	2	3	4	5	6	7	8
Element	---	nc	f	a	nc	g	nc	f (see note 3)	nc

ABSOLUTE RATINGS:

Parameter:	Ef	Eb	Ec	Pp	Ik	Alt
Unit:	V	V dc	V dc	W	mA dc	ft
Maximum:	6.9	360	---	15	100	10,000
Minimum:	5.7	---	---	---	---	---
Test conditions:	6.3 V ac	300	-62	---	---	---

GENERAL:

Qualification - Not required.

This specification sheet uses accept on zero defect sampling in accordance with MIL-PRF-1, table III.

1/ See note 1.

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TABLE I. Testing and Inspection.

Method MIL-STD-1311	Requirement or test	Conditions	Symbol	Limits		Unit
				Min	Max	
	<u>First Article inspection</u>					
1216	Base material insulating quality		---	---	---	---
	<u>Conformance inspection, part 1</u>					
1266	Total grid current	See note 2	Ic	0	-3.0	μA dc
1256	Electrode current (anode)		Ib	22.5	57.5	mA dc
1341	Power output	Esig = 40 V ac; Rp = 1,100 ohms (see note 2)	Po	4.3	---	W
1246	Audio frequency noise	Esig = 700 mV ac; Rp = 2,000 ohms; Ef = 6.3 V dc	EB	---	17	vu
1231	Emission	Eb = Ec = 30 V dc	Is	140	---	mA dc
1201	Short and discontinuity detection		---	---	---	---
	<u>Conformance inspection, part 2</u>					
1031	Low-frequency vibration	Ec = 70 V dc; Rp = 2,000 ohms	Ep	---	500	mV ac
1301	Filament current		If	1.08	1.32	A
1306	Transconductance		Sm	3,200	4,800	μmhos
1316	Amplification factor		Mu	3.7	4.3	---
1211	Insulation of electrodes		---	---	---	---
1101	Secureness of base, cap, or insert		---	---	---	---
1111	Base pin solder depth		---	---	---	---
1105	Permanence of marking		---	---	---	---
	<u>Conformance inspection, part 3</u>					
---	Life-test provisions	Group A	---	---	---	---
---	Life-test end point (500 hours)	Power output	Po	2.75	---	W

NOTES:

1. Tube types 2A3 and 6A3 are hereby deleted from this tube specification sheet.
2. This test to be performed at the conclusion of the holding period.
3. Pin 7 is to be connected to ground for equipment application.

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Referenced documents. In addition to MIL-PRF-1, this document references MIL-STD-1311.

The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

Custodians:

Army - CR
Navy - EC
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC

(Project 5960-2013-003)

Review activities:

Army - AR, AV, MI, CR4
Navy - AS, CG, MC, OS, SH
Air Force - 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil/>.