

MILITARY SPECIFICATION SHEET

ELECTRON TUBE, RECEIVING

TYPE 5886

The complete requirements for procuring the electron tube described herein shall consist of this document and the latest issue of Specification MIL-E-1.

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

DESCRIPTION: Pentode, subminiature, filamentary electrometer

(C)

Outline --- 2-1 (EIA)
 Base --- Pinch press (5 leads)
 Envelope --- T2X3
 Cathode --- Coated filament

Base connections:

Pin No.	---	1	2	3	4	7
Element	---	a	g2	+f, 1g3	-f, 2g3	g1

ABSOLUTE-MAXIMUM RATINGS:

Parameter:	Ef	Ebb	Eb	Ec2	Ec1	Ik	R1	Alt
Unit:	Vdc	Vdc	Vdc	Vdc	Vdc	μ Adc	Ohms	ft
Maximum:	1.5	---	22.5	22.5	---	300	---	10,000
Minimum:	1.0	---	---	---	---	---	---	---

TEST CONDITIONS: 1.25 22.5 --- --- -3.0 --- 60,000
 (triode connected) ---

GENERAL:

Qualification - Required

(C)

denotes changes

5886

METHOD	REQUIREMENT OR TEST	CONDITIONS	AQL (PERCENT DEFECTIVE)	INSPECTION LEVEL OR CODE	SYMBOL	LIMITS		UNIT
						MIN	MAX	
<u>Quality conformance inspection, part 1</u>								
1266	Total grid current	See notes 1 and 2	0.65	II	Ic1	0	2.5×10^{-13}	Adc
---	Voltage gain	Esig = 0.2 Vac	0.65	II	Ep	0.24	---	Vac
1201	Short and discontinuity detection		0.4	II	---	---	---	---
1256	Electrode current (anode)		0.65	II	Ib	175	225	μ Adc
<u>Quality conformance inspection, part 2</u>								
1301	Filament current		---	---	II	8.8	11.2	mAdc
1306	Transconductance	Eb = 10.5 Vdc; RI = 0	---	---	Sm	120	240	μ mhos
1316	Amplification factor (triode)	Eb = 10.5 Vdc; RI = 0	---	---	Mu	1.6	2.1	---
1331	Direct-interelectrode capacitance	No shield	---	---	Cg1-all	1.0	3.0	pF
Ⓢ 1116	Lead fatigue		---	---	---	---	---	---
Ⓢ 1211	Insulation of electrodes		---	---	---	---	---	---
Ⓢ 1105	Permanence of marking		---	---	---	---	---	---
<u>Quality conformance inspection, part 3</u>								
Ⓢ ---	Life-test provisions	Group C; triode connected	---	---	---	---	---	---
---	Life-test end points (500 hours)	Voltage gain Total grid current	---	---	Ep Ic1	0.22 ---	---	Vac Adc
---	Life-test provisions	Group C; triode connected (see note 3)	---	---	---	---	5×10^{-13}	---
---	Life-test end point (10,000 hours)	Voltage gain	---	---	Ep	0.22	---	Vac

NOTES:

1. Measurement shall be made with tube in an electrostatically shielded, light-tight container. One hour preheating is permitted prior to testing.
2. This test to be performed at the conclusion of the holding period.
3. During months in which there is production, the manufacturer shall conduct one test per month on at least five tubes.

Custodians:

Army - EL

Navy - EC

Air Force - 80

Review activities:

Army - EL, MU

Navy -

Air Force - 11, 85

DSA - ES

User activities:

Army - WC

Navy - AS, OS, MC, CG, SH

Air Force - 19

Preparing activity: Navy - EC

Agent: DSA - ES

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