

MILITARY SPECIFICATION SHEET
 ELECTRON TUBE, RECEIVING
 TYPE 6AS7G

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

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

DESCRIPTION: High current, low μ , double triode
 Outline --- 4-9
 Base --- B8-11
 Envelope --- ST16
 Cathode --- Coated unipotential

Base connections:

Pin no.	1	2	3	4	5	6	7	8
Element ---	2g	2a	2k	1g	1a	1k	h	h

ABSOLUTE RATINGS:

Parameter:	Ef	Eb	Ec	Ib/p	Pp/p	Enk	Rk/k	TE	Alt
Unit:	V	Vdc	Vdc	mAdc	W	v	Ohms	°C	ft
Maximum:	6.9	275	---	125	14.0	330	--	200	10,000
Minimum:	5.7	---	---	---	---	---	--	---	---

TEST CONDITIONS: 6.3 135 0 --- ---- --- -- --- ----

GENERAL:

Qualification - Required

METHOD	REQUIREMENT OR TEST	CONDITIONS	AQL (PERCENT DEFECTIVE)	INSPECTION LEVEL OR CODE	SYMBOL	LIMITS		UNIT
						Min	Max	
1215	<u>Qualification</u> Base material insulating quality		----	---	---	----	----	---
1256	<u>Quality conformance inspection, part 1</u> Electrode current (1) (anode)	See note 3	0.65	II	Ib	100	150	mAdc
1256	Electrode current (2) (anode)	Ec = -200 Vdc; Eb = 250 Vdc See note 3	0.65	II	Ib	----	10	mAdc
1266	Total grid current	Rg = 1.0 meg See notes 2 and 4	0.65	II	Ic	0	-4.0	μ Adc
1231	Emission current	Eb = Ec = 10 Vdc See note 5	0.65	II	Is	75	----	mAdc
1201	Shorts and discontinuity detection		0.4	II	---	----	----	---
1301	<u>Quality conformance inspection, part 2</u> Heater current		6.5	S3	Ir	2.26	2.74	A
1336	Heater-cathode leakage	See note 1	6.5	S3	Ihk	----	50	μ Adc
1031	Low-frequency vibration	Rp = 2,000 ohms; Ec = -7 Vdc; Rk = 0 See note 1	6.5	S3	Ep	----	200	mVac
1306	Transconductance	See note 3	6.5	S3	Sm	5800	8200	μ mhos
1316	Amplification factor	See note 3	6.5	S3	M	1.4	2.6	---
1105	Permanence of marking		----	---	---	----	----	---
1101	Secureness of base, base insert, and cap		6.5	S3	---	----	----	---
1111	Base pin solder depth		6.5	S3	---	----	----	---
1501	<u>Quality conformance inspection, part 3</u> Intermittent life- test (500 hours)	Group A; Rk = 125; Rg = 1 meg; Ehk = -300 Vdc See note 1	----	---	---	----	----	---
----	Intermittent life- test end points (500 hours)							
1306	Transconductance		----	---	Sm	4900	----	μ mhos
1266	Total grid current		----	---	Ic	----	-10	μ Adc
1336	Heater-cathode		----	---	Ihk	----	100	μ Adc

NOTES:

1. Tie 1a to 2a; 1g to 2g; 1k to 2k
2. With both units operating, I_c is the sum of I_{1c} and I_{2c}.
3. With both units operating, read each unit separately.
4. This test to be performed at the conclusion of the holding period.
5. Read each unit separately: ground elements of opposite side; R_k = 0.

Custodians:

Army - EL
 Navy - EC
 Air Force - 80

Preparing activity:

Air Force - 80

Review activities:

Army - EL
 Navy - EC
 Air Force - 11, 17

(Project 5960-2524)

User activities:

Army - MU
 Navy - WP, MC, CG
 Air Force - None