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INCH-POUND

MIL-PRF-1/126E
24 April 2007
SUPERSEDING
MIL-E-1/126D
3 December 1968

PERFORMANCE SPECIFICATION SHEET

ELECTRON TUBE, RECEIVING

TYPES 6V6 AND 6V6GT 1/ 2/
a b

Inactive for new design
after 7 March 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 specification sheet and MIL-PRF-1.

DESCRIPTION: Beam power pentode

Outline	a	- - -	8-6 (EIA).
Outline	b	- - -	9-11 or 9-41 (EIA).
Base	a	- - -	B7-22 (phenolic).
Base	b	- - -	Phenolic (see note 1).
Envelope	a	- - -	MT8.
Envelope	b	- - -	T9.

Cathode a, b - - - Coated unipotential.

Base connections:

Pin No.		- - -	1	2	3	4	5	7	8
Element	a	- - -	sh	h	a	g2	g1	h	k, g3
Element	b	- - -	nc or no pin	h	a	g2	g1	h	k, g3

ABSOLUTE RATINGS:

Parameter:		Ef	Eb	Ec1	Ec2	Ik	Pp	Pg2	Ehk	Alt
Unit:		V	V dc	V dc	V dc	mA dc	W	W	v	ft
Maximum:	a, b	6.9	350	- - -	310	65	13.2	2.2	100	10,000
Minimum:	a, b	5.7	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
Test conditions:	a, b	6.3	250	-12.5	250	- - -	- - -	- - -	- - -	- - -

GENERAL:

Qualification - Required.

1/ To identify those tests that are applicable to a given type or to several types; tube types are designated by letters.

2/ Formerly tube types 6V6Y and 6V6GTY.

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TABLE I. Requirements and tests.

MIL-STD-1311 method	Requirement or test	Type	Conditions	Acceptance level (see note 5)	Symbol	Limits Min	Limits Max	Unit
	Conformance inspection, part 1							
1266	Total grid current	a, b	See note 2	0.65	Ic1	0	-2.0	µA dc
1256	Electrode current (anode)	a, b		0.65	Ib	33	57	mA dc
1256	Electrode current (screen grid)	a, b		0.65	Ic2	0	7.5	mA dc
1341	Power output	a, b	Class A amplifier; Esig = 8.8 V ac; Rp = 5,000 ohms	0.65	Po	3.6	- - -	W
1246	Audio frequency noise	a, b	Esig = 280 mV ac; Rp = 2,000 ohms, (see note 3)	0.65	EB	- - -	- - -	VU
1231	Emission	a, b	Eb = Ec2 = Ec1 = 30 V dc (see note 2)	0.65	Is	100	- - -	mA dc
1201	Shorts and discontinuity detection	a, b		0.4	- - -	- - -	- - -	- - -
	Conformance inspection, part 2							
1031	Low-frequency vibration	a, b	Ec1 = -25 V dc; Rp = 2,000 ohms	6.5	Ep	- - -	500	mV ac
1301	Heater current	a, b		6.5	If	410	490	mA
1336	Heater-cathode leakage	a, b		6.5	Ihk	- - -	50	µA dc
1306	Transconductance	a, b		6.5	Sm	3,000	5,200	µmhos
1331	Direct-interelectrode capacitance	a b	No shield Shield No. 308	6.5	Cgp Cin Cout	- - - 7.9 5.6	0.9 11.1 13.5	pF pF pF
1101	Secureness of base wafer insert	a		6.5	- - -	- - -	- - -	- - -
1101	Secureness of base	b		6.5	- - -	- - -	- - -	- - -
1111	Base pin solder depth	a, b	See note 4.	6.5	- - -	- - -	- - -	- - -
1211	Insulation of electrodes	a, b		4.0	- - -	10	- - -	MegΩ
1105	Permanence of marking	a, b		- - -	- - -	- - -	- - -	- - -

See notes at the end of the table.

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TABLE I. Requirements and tests - Continued.

MIL-STD-1311 method	Requirement or test	Type	Conditions	Acceptance level (see note 5)	Symbol	Limits		Unit
						Min	Max	
	Conformance inspection, part 3							
1501	Intermittent life	a, b	Group A; Eb = Ec2 = 300 V dc; Ec1 = -20 V dc; Ehk = 100 V	- - -	- - -	- - -	- - -	- - -
- - -	Life-test end point (intermittent) (500 hours)	a, b	Power output	- - -	Po	2.3	- - -	W

NOTES:

1. The base shall be one of the following: B6-81, B6-84, B7-7, B7-59, or B8-251.
2. This test to be performed at the conclusion of the holding period.
3. The rejection level shall be set at the VU meter reading obtained during calibration.
4. This test applies for flexible leads as well as for rigid leads.
5. This specification sheet uses accept on zero defect sampling plan in accordance with MIL-PRF-1, table III.

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

Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue, due to the extent of the changes.

Custodians:
Army - CR
Navy - EC
Air Force - 11
DLA - CC

Review activities:
Army - AR, AV, MI
Navy - AS, CG, MC, OS, SH
Air Force - 19, 99

Preparing activity:
DLA - CC

(Project 5960-2007-017)

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 http://assist.daps.dla.mil.