

PERFORMANCE SPECIFICATION SHEET

ELECTRON TUBE, RECEIVING
 TYPE 6360

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: Double tetrode, rf amplifier, F1 = 200 MHz.
 Outline: 6-4 (EIA).
 Base: E9-1.
 Envelope: T6-1/2.
 Cathode: Coated unipotential.
 Base connections:

Pin No.	1	2	3	4	5	6	7	8	9
Element	1g1	k, int sd	2g1	h	h	1a	1g2, 2g2	2a	hct

ABSOLUTE MAXIMUM RATINGS:

Parameter:	Ef	Eb	Ec1	Ec2	Ehk	Ik	Ib
Unit:	V	V dc	V dc	V dc	v	mA dc	mA dc
Maximum:							
Class C, Telep (continuous duty)	6.9 or 13.9	240	-150	200	100	2 x 40	2 x 37.5
Class C, Teleg (continuous duty)	6.9 or 13.9	300	-150	200	100	2 x 50	2 x 45
Minimum:	5.7 or 11.3	---	---	---	---	---	---
Test conditions:	6.3 or 12.6	200	Adj	200	---	---	2 x 30

ABSOLUTE MAXIMUM RATINGS:

Parameter:	Ic1	Pg1	Pg2	Pp	Pi	TE	Alt
Unit:	mA dc	W	W	W	W	°C	ft
Maximum:							
Class C, Telep (continuous duty)	2 x 3	2 x 0.2	2 x 0.65	2 x 3.3	2 x 7.5	225	1/
Class C, Teleg (continuous duty)	2 x 3	2 x 0.2	2 x 1.0	2 x 5.0	2 x 11.25	225	1/
Minimum:	---	---	---	---	---	---	---
Test conditions:	---	---	---	---	---	---	---

See footnotes at end of table I.

GENERAL:

Qualification: Required.

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TABLE I. Testing and inspection.

Inspection	Method	Conditions	Acceptance level	Inspection level or code	Symbol	Limits		Unit
						Min	Max	
<u>Conformance inspection, part 1</u>								
Heater current	1301	Ef = 6.3 V	0.65	II	If	770	880	mA dc
Electrode current (1) (anode)	1256	Ec1 = -15 V dc <u>2/</u>	0.65	II	Ib	10	65	mA dc
Total grid current	1266	Eb = Ec2 = 150 V dc; Ib = 2 x 40 mA dc; t = 180 sec <u>3/</u>	0.65	II	Ic1	---	-6.0	μA dc
Peak emission	1231	eb = ec2 = 200 V; Ec1 = +60 V <u>4/</u>	0.65	II	is	800	---	mA
Short and discontinuity detection	1201		0.4	II	---	---	---	---
<u>Conformance inspection, part 2</u>								
Amplification factor (screen)	1316	<u>2/ 6/</u>	---	---	Mu	5.6	9.3	---
Direct-interelectrode capacitance	1331	<u>5/</u>	---	---	{ Cgp Cin Cout	{ --- 5.6 2.2	{ 0.1 6.8 3.0	{ pF pF pF
Low-frequency vibration	1031	Eb = 250 V dc; Ec/Ib = 10 mA dc; Rp = 2,000 ohms <u>2/</u>	---	---	Ep	---	800	mV ac
Power output	1236	Class C amplifier; F = 150 MHz; Eb = 300 V dc; Ic1 = 2 mA dc (max); Ec2 = 175 V dc; Ib = 75 mA dc (max); Ic2 = 5 mA dc (max); Rg2 = 100 ohms; Ec1 = -40 V dc <u>7/</u>	---	---	Po	10	---	W
Base strain	1121		---	---	---	---	---	---
Glass strain	2126		2.5	I	---	---	---	---
Insulation of electrodes	1211		4.0	S3	---	---	---	---
Permanence of marking	1105		---	---	---	---	---	---

See footnotes at end of table.

TABLE I. Testing and inspection - Continued.

Inspection	Method	Conditions	Acceptance level	Inspection level or code	Symbol	Limits		Unit
						Min	Max	
<u>Conformance inspection, part 3</u>								
Life-test provisions	---	Group C; Class "C" amplifier	---	---	---	---	---	---
Life-test end points (500 hours)	---	Power output	---	---	Po	8	---	W
		Peak emission	---	---	is	600	---	mA
		Total grid current	---	---	Ic1	---	-10.0	μ A dc

- 1/ See "Reduced pressure (altitude) rating", and altitude, maximum peak voltage.
- 2/ Each unit shall be read separately. Control grid of unit not under test shall be connected to -100 V dc.
- 3/ This test to be performed at the conclusion of the holding period.
- 4/ Test both units in parallel. Ec1 is a rectangular pulse voltage with a pulse width of 800 μ s; this pulse voltage is superimposed on Ec1 = -100 V dc (total pulse voltage = 160 V.) Duty cycle = 0.04.
- 5/ Each unit shall be tested separately; ground unit not under test.
- 6/ Screen grid Mu is determined by measuring grid voltage required to adjust anode current for grid 2 voltages of 210 and 190 volts. Mu = 20/ Δ Ec1 at Eb = 200 V dc; Ib = 30 mA dc.
- 7/ Power output is total power at drive frequency delivered to load output circuit adjusted so that Pp does not exceed 2 x 5 watts.

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Custodian:

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

Review activities:

Army - AR
Navy - AS, CG, MC, OS
Air Force - 19, 99

Preparing activity:

DLA - CC

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