

INCH-POUND

MIL-PRF-1/1308E  
27 July 2010  
SUPERSEDING  
MIL-PRF-1/1308D  
19 July 1999

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: Not required.

AMSC N/A

FSC 5960

MIL-PRF-1/1308E

TABLE I. Testing and inspection.

Inspection	Method MIL-STD- 1311	Conditions	Acceptance level 8/	Symbol	Limits		Unit
					Min	Max	
<u>Conformance inspection, part 1</u>							
Heater current	1301	$E_f = 6.3 \text{ V}$	0.65	If	770	880	mA dc
Electrode current (1) (anode)	1256	$E_{c1} = -15 \text{ V dc}$ 2/	0.65	Ib	10	65	mA dc
Total grid current	1266	$E_b = E_{c2} = 150 \text{ V dc};$ $I_b = 2 \times 40 \text{ mA dc};$ $t = 180 \text{ sec}$ 3/	0.65	Ic1	---	-6.0	$\mu\text{A dc}$
Peak emission	1231	$E_b = E_{c2} = 200 \text{ V};$ $E_{c1} = +60 \text{ V}$ 4/	0.65	is	800	---	mA
Short and discontinuity detection	1201		0.4	---	---	---	---
<u>Conformance inspection, part 2</u>							
Amplification factor (screen)	1316	2/ 6/	---	Mu	5.6	9.3	---
Direct-interelectrode capacitance	1331	5/	---	{ Cgp Cin Cout	{ --- 5.6 2.2	{ 0.1 6.8 3.0	{ pF pF pF
Low-frequency vibration	1031	$E_b = 250 \text{ V dc};$ $E_c/I_b = 10 \text{ mA dc};$ $R_p = 2,000 \text{ ohms}$ 2/	---	Ep	---	800	mV ac
Power output	1236	Class C amplifier; F = 150 MHz; $E_b = 300 \text{ V dc};$ $I_{c1} = 2 \text{ mA dc (max)};$ $E_{c2} = 175 \text{ V dc};$ $I_b = 75 \text{ mA dc (max)};$ $I_{c2} = 5 \text{ mA dc (max)};$ $R_{g2} = 100 \text{ ohms};$ $E_{c1} = -40 \text{ V dc}$ 7/	---	Po	10	---	W
Base strain	1121		---	---	---	---	---
Glass strain	2126		2.5	---	---	---	---
Insulation of electrodes	1211		4.0	---	---	---	---
Permanence of marking	1105		---	---	---	---	---

See footnotes at end of table.

TABLE I. Testing and inspection - Continued.

Inspection	Method MIL-STD- 1311	Conditions	Acceptance level 8/	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	---	P <sub>o</sub>	8	---	W
		Peak emission	---	i <sub>s</sub>	600	---	mA
		Total grid current	---	i <sub>c1</sub>	---	-10.0	μA 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 μs; 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.  $\mu = 20/\Delta E_{c1}$  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.
- 8/ 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 specification sheet 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.

Custodian:

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

Preparing activity:

DLA - CC  
(Project 5960-2010-003)

Review activities:

Army - AR  
Navy - AS, CG, MC, OS  
Air Force - 19, 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.daps.dla.mil/>.