

INCH-POUND

MIL-E-1/85D
17 September 2013
SUPERSEDING
MIL-E-1/85C
18 February 1971

MILITARY SPECIFICATION SHEET
ELECTRON TUBE, RECEIVING
TYPE 5763

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: Pentode, miniature, 175 MHz, beam-power amplifier

Outline: 6-3 (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	a	nc	g3	h	h	g2	k	g1	g1

ABSOLUTE RATINGS:

Parameter:	Ef	Eb	Ec1	Ec2	Ec3	Ib	Ic1	Ik	Pp	Ehk	Pg2	Pi	TE	Alt
Unit:	V	Vdc	Vdc	Vdc	Vdc	mAdc	mAdc	mAdc	W	v	W	W	°C	ft
Maximum:	6.6	300	-125	250	0	50	5.0	65	12	100	2.0	15	250	Note 1
Minimum:	5.4	---	---	---	---	---	---	---	---	---	---	---	---	---

TEST CONDITIONS: 6.0 250 -7.5 250 0 --- --- --- --- --- --- --- --- ---

GENERAL:

Qualification – Not required

This specification sheet uses accept on zero defect sampling in accordance with MIL-PRF-1, table III.

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TABLE I. Testing and inspection.

Requirement or test	MIL-STD-1311 Method	Conditions	Symbol	Limits		Unit
				Min	Max	
<u>Conformance inspection, part 1</u>						
Electrode current (anode)	1256		I _b	33	57	mAdc
Power oscillation	1236	E _b = 300 Vdc; R _{g1} = variable; I _b = 58 mAdc; F = 135 MHz	P _o	1.5	---	W
Emission	1231	E _b = E _c = E _{c2} = 30 Vdc; E _{c3} = 0 See note 2.	I _s	170	---	mAdc
Total grid current	1266	R _{g1} = 0.1 MegΩ See note 2.	I _c	0	-2.0	μAdc
Short and discontinuity detection	1201		---	---	---	---
<u>Conformance inspection, part 2</u>						
Low-frequency vibration	1031	E _{c1} = -15Vdc; R _p = 2,000 ohms	E _p	---	500	mVac
Heater current	1301		I _f	690	810	mAdc
Heater-cathode leakage	1336		I _{hk}	---	50	μAdc
Electrode current (screen)	1256		I _{c2}	---	10	mAdc
Direct-interelectrode capacitance	1331	No shield	{ C _{gp} C _{in} C _{out}	---	0.3	pF
				8.0	11.0	pF
				3.8	5.2	pF
Insulation of electrodes	1211		---	---	---	---
Base strain	1121		---	---	---	---
Glass strain	2126		---	---	---	---
Permanence of marking	1105		---	---	---	---
<u>Conformance inspection, part 3</u>						
Intermittent life test	1501	Group A; E _b = 300 Vdc; E _{c2} = 300 Vdc; R _{g1} = 17,000 ohms; R _{g2} = 32,000 ohms; I _b = 45 mAdc; F = 120 MHz	---	---	---	---
Intermittent life-test end points (500 hours)	---	Power oscillation	P _o	1.0	---	W

NOTES:

- 1/ See "Reduced pressure (altitude) rating", and altitude, maximum peak voltage.
- 2/ This test to be performed at the conclusion of the holding period.

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Referenced documents. In addition to MIL-PRF-1, this document references the following: 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.

Custodians:

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

Preparing activity:

DLA - CC
(Project 5960-2013-023)

Review activities:

Army - MI
Navy - AS, CG, MC
Air Force - 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.dla.mil/>.