

TUNG-SOL

HIGH VACUUM CATHODE-RAY TUBE

ELECTROSTATIC DEFLECTION AND FOCUSING

NO. 1 PHOSPHOR
GREEN FLUORESCENT SCREEN
MEDIUM PERSISTENCE

HEATER
6.3 VOLTS ($\pm 10\%$) 0.6 AMPERE
AC OR DC

COATED UNIPOTENTIAL CATHODE

GLASS BULB

SMALL SHELL MAGNAL 11 PIN BASE

RATINGS*

MAXIMUM ANODE NO. 2 VOLTAGE (HIGH VOLTAGE ELECTRODE)	1100	VOLTS
MAXIMUM ANODE NO. 1 VOLTAGE (FOCUSING ELECTRODE)	550	VOLTS
GRID VOLTAGE (CONTROL ELECTRODE)	NEVER	POSITIVE
MAXIMUM PEAK VOLTAGE BETWEEN ANODE NO. 2 AND ANY DEFLECTOR	660	VOLTS
MAXIMUM DC HEATER CATHODE POTENTIAL ^A	125	VOLTS
MAXIMUM GRID CIRCUIT RESISTANCE	1.5	MEGOHMS
MAXIMUM IMPEDANCE OF ANY DEFLECTOR CIRCUIT AT HEATER SUPPLY FREQUENCY	1.0	MEGOHM

*MAXIMUM RATINGS ARE ABSOLUTE VALUES

DIRECT INTERELECTRODE CAPACITANCES (APPROX.)

CONTROL ELECTRODE TO ALL OTHER ELECTRODES	8.0	μf
CATHODE TO ALL OTHER ELECTRODES	5.5	μf
D1 TO D2	0.6	μf
D3 TO D4	1.1	μf
D1 TO ALL OTHER ELECTRODES	8.5	μf
D3 TO ALL OTHER ELECTRODES	9.0	μf
D1 TO ALL OTHER ELECTRODES EXCEPT D2	8.0	μf
D2 TO ALL OTHER ELECTRODES EXCEPT D1	4.6	μf
D3 TO ALL OTHER ELECTRODES EXCEPT D4	7.5	μf
D4 TO ALL OTHER ELECTRODES EXCEPT D3	3.6	μf

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

ANODE NO. 2 VOLTAGE ^B	500	1000	VOLTS
ANODE NO. 1 VOLTAGE FOR FOCUS AT 75% OF GRID VOLTAGE CUT-OFF (APPROX.) ^C	125	250	VOLTS
GRID VOLTAGE FOR CUT-OFF ^D	-30 ^E	-60 ^E	VOLTS
DEFLECTION SENSITIVITY: ^F			
D1 AND D2	0.220	0.110	MM/VOLT DC
D3 AND D4	0.260	0.130	MM/VOLT DC
DEFLECTION FACTOR: ^F			
D1 AND D2	115	230	VOLTS DC/IN
D3 AND D4	98	196	VOLTS DC/IN

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SPOT POSITION AND TEST CONDITIONS

THE UNDEFLECTED FOCUSED SPOT FALLS WITHIN A 10 MM. SQUARE CENTERED ON THE TUBE FACE.

TEST CONDITIONS ARE:

ANODE NO. 2 VOLTAGE	1000	VOLTS
ANODE NO. 1 VOLTAGE	ADJUSTED FOR FOCUS	
GRID VOLTAGE	NEAR CUT-OFF	
DEFLECTOR RESISTORS (CONNECTED TO ANODE NO. 2)	1	MEG OHM EACH

NOTE: SHIELD TUBE FROM ALL STRAY FIELDS.

A WHEN THE HEATER IS OPERATED AT A NEGATIVE POTENTIAL WITH RESPECT TO THE CATHODE THEN THE CATHODE RETURN SHOULD BE MADE AT THE CENTER TAP OF THE FILAMENT TRANSFORMER.

B USE OF LESS THAN 500 VOLTS RESULTS IN DECREASED BRILLIANCE.

C CERTAIN TUBES MAY REQUIRE ADJUSTMENT OF $\pm 20\%$ TO -45% WITH GRID VOLTAGE BETWEEN ZERO AND CUT-OFF.

D THE VISUAL EXTINCTION OF A FOCUSED SPOT.

E THE GRID SUPPLY SHOULD BE VARIABLE TO $\pm 50\%$.

F VALUES SUBJECT TO VARIATION OF $\pm 20\%$.

DEFLECTOR LOCATIONS:

D1 AND D2

NEAREST TO SCREEN

D3 AND D4

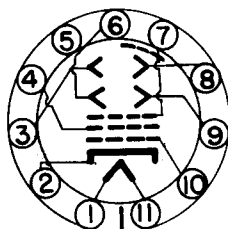
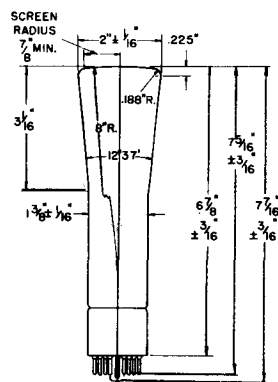
NEAREST TO BASE

D1

SAME SIDE OF TUBE AS PIN NO. 4

D3

SAME SIDE AS PIN NO. 1



BOTTOM VIEW

1. HEATER
2. CATHODE
3. DEFLECTOR NO. 1 (D1)
4. ANODE NO. 1
5. NO CONNECTION
6. DEFLECTOR NO. 4 (D4)
7. ANODE NO. 2
8. DEFLECTOR NO. 2 (D2)
9. DEFLECTOR NO. 3 (D3)
10. GRID
11. HEATER