

17BP4-B

KINESCOPE

RECTANGULAR GLASS TYPE MAGNETIC FOCUS

ALUMINIZED SCREEN MAGNETIC DEFLECTION

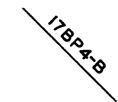
TAP A

DATA			
General:			
Heater, for Unipotential Cathode: Voltage 6.3 ac or dc volts Current 0.6 \pm 10% amp Direct Interelectrode Capacitances: Grid No.1 to all other electrodes 6			
Faceplate, Spherical			
Fluorescence			
Diagonal			
Overall length 19-3/16" ± 3/8" Greatest width 15-25/64" ± 1/8" Greatest height 12-9/32" ± 1/8" Diagonal 16-5/8" ± 1/8" Neck length 7-1/2" ± 3/16" Screen Dimensions (Minimum):			
Greatest width			
Coating			

718PA-8



Maximum Ratings, Design-Center	Values:		
ULTOR VOLTAGE		16000 max	. volts
ODID N. O. MOLTAGE		410 max.	_ t
GRID-No.1 VOLTAGE:		410 max	. 40, 23
_		125 may	. volts
Negative bias value		125 max	
Positive bias value		0 max	
Positive peak value		2 max	. volts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect			
During equipment warm-up p			
not exceeding 15 seconds		410 max.	. volts
After equipment warm-up pe	riod	150 max.	. volts
Heater positive with respect	to cathode.	150 max.	. volts
Equipment Design Ranges:	1 . 4	. *J	,
With any ultor voltage (E_{C3}) and grid-No.2 voltage (E_{C2})	Detween 1200 I between 15	o "ana 10000 o and 110 vi	lts
	, between 15	0 410 0	
Grid-No.1 Voltage for			
Visual Extinction of		F =	, , l
Focused Raster	−9.3% to −	24% of Ec2	volts
Grid-No.1 Video Drive			
from Raster Cutoff			j
(Black Level):			
White-level value			
(Peak positive)	9.3% to 2	4% of Eco	volts
Grid-No.2 Current	-15 t		μ amp
·		-	7
Focusing-Coil Current (DC).	1 203 ×	106 ± 10%	ma
L. T. W. W. J. C. W. J. A.			İ
<pre>lon-Trap Magnet Current (Average)**</pre>	Ec3	00	· l
(Average)	$\sqrt{\frac{1600}{1600}}$		ma
Minimum Field Strength of	• _ ±000	<u>~</u>	
PM Ion-Trap Magnet§	Lc ₃	v 22	gausses
rm ton-trap magnets.	√ 1600	0 × 33	yausses
Field Strength of Adjustable	1 1000	•	
Centering Magnet	0 t	o 8	gausses
Examples of Use of Design Rang			Ĭ
With ultor voltage of	12000	14000	volts
and grid-No.2 voltage of	300	300	volts
Grid-No.1 Voltage for			
Visual Extinction of			
Focused Raster	-28 to -72	-28 to -72	volts
Grid-No.1 Video Drive	20 -0 ,2	,_ ,_	1
from Raster Cutoff			
(Black Level):			ŀ
White-level value			ļ
(Peak positive)	28 to 72	28 to 72	volts
	92 ± 10%		ma
Focusing-Coil Current (DC).	32 I 10%	33 I IU%	ша
Minimum Field Strength of	20	21	a 211 6 2 2 2
PM Ion-Trap Magnet	29	31	gausses
*,O,**,§: See next page.			
2 EG		TEÑTATIV	E DATA 1



Maximum Circuit Values:

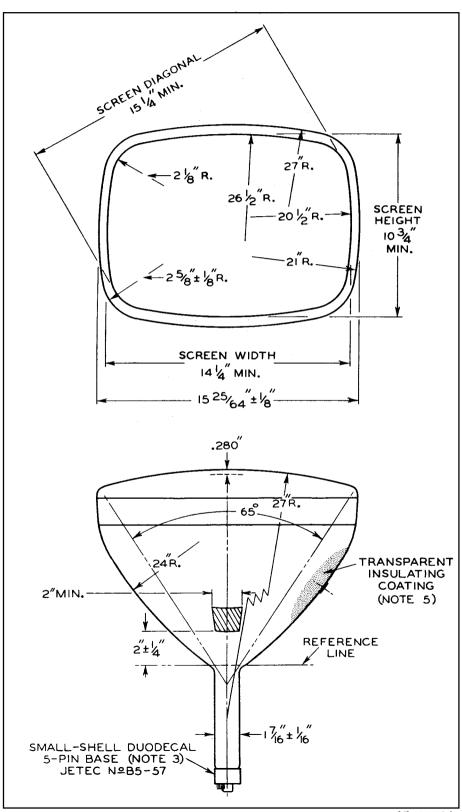
Grid-No.1-Circuit Resistance 1.5 max. megohms

- * Brilliance and definition decrease with decreasing ultor voltage. In general, the ultor voltage should not be less than 12000 volts.
- For specimen focusing coil similar to JETEC Focusing Coil No.109 positioned with air gap toward kinescope screen and center line of air gap 3 inches from Reference Line (See Dimensional Outline). The indicated current is for condition with sharp focus at center of picture area and combined grid-No.1 voltage and video-signal voltage adjusted to produce a highlight brightness of 30 foot-lamberts measured on an Indian Head Test Pattern set for a 14-1/4" x 10-3/4" picture size.
- ** For JETEC Ion-Trap Magnet No.117, or equivalent, located with the trailing edge of the pole pieces located over the gap between grid No.1 and grid No.2 and rotated to give maximum brightness.
- For specimen PM ion-trap magnet, such as Heppner Model No.E437, or equivalent, located in optimum position and rotated to give maximum brightness. For agiven equipment application, the tolerance range for the strength of the PM ion-trap magnet should be added to the minimum value. The maximum strength of this magnet should not exceed the specified minimum value by more than 6 gausses. This procedure will insure use of a PM ion-trap magnet allowing adequate adjustment to permit satisfactory performance without loss of highlight brightness.

For X-ray shielding considerations, see sheet X-RAY PRECAUTIONS FOR CATHODE-RAY TUBES at front of this Section

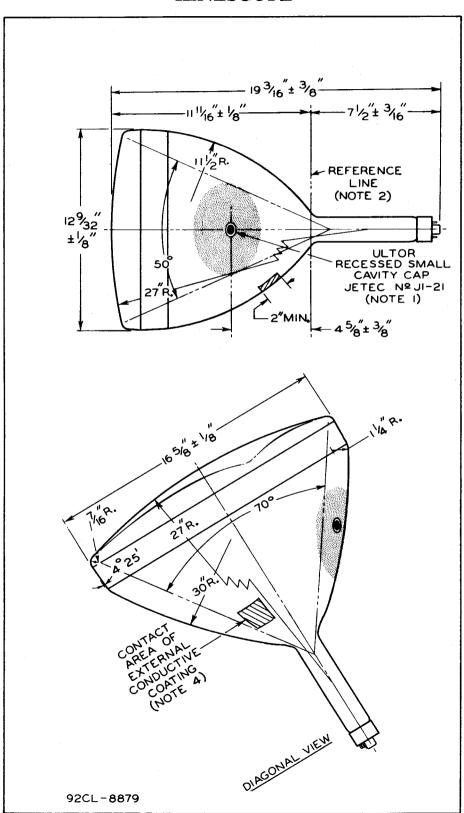
17874.8

RCA 17BP4-B KINESCOPE













NOTE 1: THE PLANE THROUGH THE TUBE AXIS AND VACANT PIN POSITION No.6 MAY VARY FROM THE PLANE THROUGH THE TUBE AXIS AND ULTOR TERMINAL BY ANGULAR TOLERANCE (MEASURED ABOUT THE TUBE AXIS) OF \pm 30°. ULTOR TERMINAL IS ON SAME SIDE AS VACANT PIN POSITION No.6.

NOTE 2: WITH TUBE NECK INSERTED THROUGH FLARED END OF REFERENCE-LINE GAUGE JETEC No.110 (SHOWN AT FRONT OF THIS SECTION) AND WITH TUBE SEATED IN GAUGE, THE REFERENCE LINE IS DETERMINED BY THE INTERSECTION OF THE PLANE CC! OF THE GAUGE WITH THE GLASS FUNNEL.

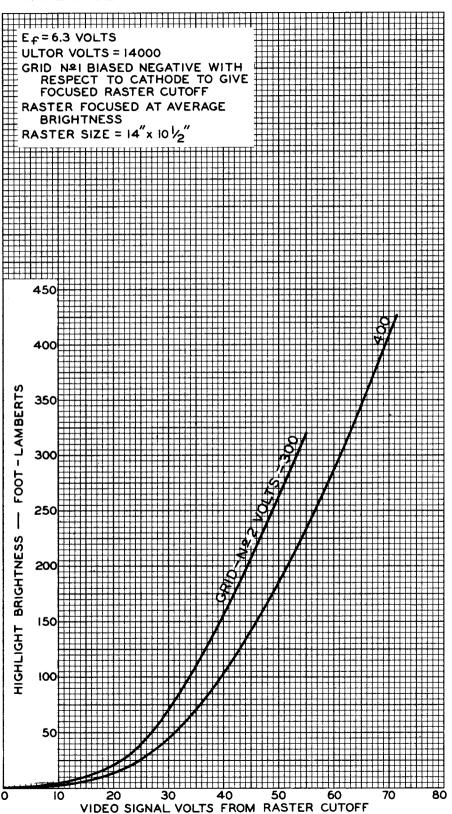
NOTE 3: SOCKET FOR THIS BASE SHOULD NOT BE RIGIDLY MOUNTED; IT SHOULD HAVE FLEXIBLE LEADS AND BE ALLOWED TO MOVE FREELY. BOTTOM CIRCUMFERENCE OF BASE SHELL WILL FALL WITHIN A CIRCLE CONCENTRIC WITH BULB AXIS AND HAVING A DIAMETER OF 2-3/4".

NOTE 4: THE DRAWING SHOWS THE MINIMUM SIZE AND LOCATION OF THE CONTACT AREA OF THE EXTERNAL CONDUCTIVE COATING. THE ACTUAL AREA OF THIS COATING WILL BE GREATER THAN THE CONTACT AREA SO AS TO PROVIDE THE REQUIRED CAPACITANCE. EXTERNAL CONDUCTIVE COATING MUST BE GROUNDED.

NOTE 5: TO CLEAN THIS AREA, WIPE ONLY WITH SOFT DRY LINT-LESS CLOTH.



AVERAGE GRID-DRIVE CHARACTERISTICS



TOP W. B





AVERAGE GRID-DRIVE CHARACTERISTICS

