PHILCO CATHODE RAY TUBE DATA SHEET

TENTATIVE

DESCRIPTION

The 5AKP tubes are magnetic focus and deflection cathode ray tubes intended primarily for use in flying spot scanner applications. These tubes particularly feature extremely small spot size. Other features include a metal backed screen for high brightness, an external conductive coating on the neck which should be grounded to prevent corona between the yoke and the neck, and an external insulating coating on the bulb cone to reduce arcing over the bulb.

ELECTRICAL DATA

Focusing Method	1agnetic –
Deflecting Method	
Deflection Angle, approximate	Degrees
Direct Interelectrode Capacitance, approximate	-
Cathode to all.	.3 . 5 μμf
Grid #1 to all	.4.0 μμf
External Coating Capacitance	nin. µµf
500 r	nax. μμf

OPTICAL DATA

Phosphor Number	P15	P24
Fluorescent Color	. Blue-Green	Light Green
Persistence	. Very Short	Extremely Short
MECHANICAL DATA		
Overall Length		$.12\%_{16} \pm \frac{1}{4}$ Inches
Greatest Diameter of Bulb		\dots 5 $\pm \frac{1}{8}$ Inches
Minimum Useful Screen Diameter		, ,
(maximum assured diameter)		\dots $$
Base		<i></i>
Basing		<i></i>
Anode Contact		J1-21
Anode Contact Aligns with Vacant	Pin $#3 \pm 10^{\circ}$	2

MAXIMUM RATINGS (Design Center Values)

maximum karintoo (Posigii domoi Tairoos)
Heater Voltage
Heater Current at 6.3 Volts
Anode Voltage (Note #1)
Grid #1 Voltage
Negative Bias Value
Positive Peak Value
Positive Bias Value 0 Max. Volts DC
Peak Heater-Cathode Voltage (Note #2)
Heater Negative with Respect to Cathode
During Warmup Period not to exceed 15 Sec 410 Max. Volts
After Equipment Warmup Period
Heater Positive with Respect to Cathode

TYPICAL OPERATING CONDITIONS

MAXIMUM CIRCUIT VALUES

Grid #1 Circuit Resistance......1.5 Max. Megs.

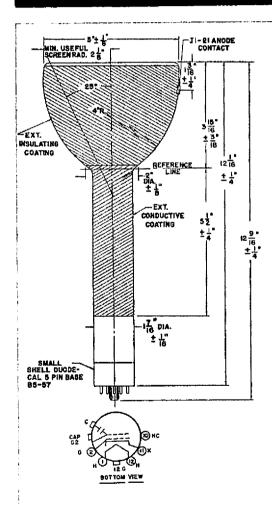
NOTES

- 1. Anode and Grid #2 are connected together within the tube and are referred to herein as anode.
- 2. Cathode should be returned to one side or to the mid-tap of the heater transformer winding.
- 3. For visual extinction of the undeflected focused spot.
- 4. For standard focus coil JETEC #106 or equivalent, with the combined Grid #1 bias voltage and video signal voltage adjusted for 200 microamperes of anode current.

5AKP15 5AKP24 FLYING SPOT SCANNER TUBES

CENERAL DESCRIPTION

- as flying spice light manus. The SAKP24 is particularly
- adapsical for use of antipage
- SCHORES,

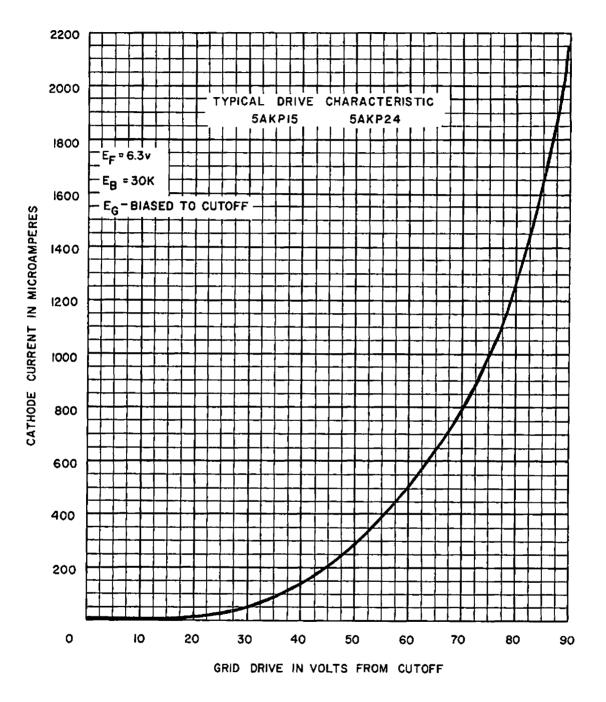


MECHANICAL NOTES

- 1. The reference line is determined by the position where reference line gauge JETEC #112 rests against the funnel.
- 2. The anode contact aligns with vacant pin position $\#3 \pm 10^{\circ}$.
- 3. External conductive coating must be grounded.
- 4. Center line of bulb will not deviate more than 2° in any direction from the perpendicular erected at the center of the bottom of the base.

APPLICATION NOTE

At or near maximum anode potential suitable precautions should be taken to prevent arcing between the anode button and the deflection yoke during high humidity conditions. A corona shield such as Lansdale #007-9174 affixed to the bulb around the button will prevent any arcing along the outside of the bulb.



WARNING

X-ray radiation shielding may be necessary to protect against possible danger of personal injury from prolonged exposure at close range when this tube is operated at recommended anode voltages.

, X © MANOYSN © 2000 € 1968 29 € Yesterre 60 Oct. 100 March 11 10 Armenika an 1980 Va