

7MP- CATHODE-RAY TUBES

Highly similar to the Type 7BP- Cathode-ray Tubes, except in bulb shape, are the Type 7MP- Cathode-ray Tubes. These are magnetically focussed and deflected cathode-ray tubes primarily designed for radar indicator and other applications requiring a relatively large, flat screen area and a long persistence screen. Among the other radar-type tubes which may be ordered from Du Mont are the Types 5FP-, 10KP- and 12SP-.

GENERAL CHARACTERISTICS

Electrical

Heater Voltage	6.3 Volts
Heater Current	$0.6 \pm 10\%$ Ampere
Focusing Method	Magnetic
Deflecting Method	Magnetic
Deflecting Angle (Approx.)	50 Degrees
Phosphor	No. 7
Fluorescence	Blue
Phosphorescence	Yellow
Persistence	Long
Direct Interelectrode Capacitances, Approx.	
Cathode to all other electrodes	$5 \mu\mu\text{f.}$
Grid No. 1 to all other electrodes	$6 \mu\mu\text{f.}$



Mechanical

Overall Length	$12\frac{3}{4} \pm \frac{3}{8}$ Inches
Greatest Diameter of Bulb	$7\text{-}3/16 \pm \frac{1}{8}$ Inches
Minimum Useful Screen Diameter	6 Inches
Bulb Contact (Recessed Small Cavity Cap)	J1-21
Base (Small Shell Duodecal 5-Pin)	B5-57
Basing	12D
Bulb Contact Alignment	
J1-21 Contact aligns with vacant pin position No. 3	± 10 Degrees

MAXIMUM RATINGS—(Design Center Values)

Anode Voltage	8,000 Max. Volts D-C
Grid No. 2 Voltage	-180 to +700 Max. Volts D-C or Peak A-C
Grid No. 1 Voltage	
Negative Bias Value	180 Max. Volts D-C
Positive Bias Value ¹	0 Max. Volts D-C
Positive Peak Value	2 Max. Volts
Peak Grid No. 1 Drive from Cut-off	65 Max. Volts
Peak Heater-Cathode Voltage	
Heater Negative with respect to cathode	125 Max. Volts D-C
Heater Positive with respect to cathode	125 Max. Volts D-C

TYPICAL OPERATING CONDITIONS

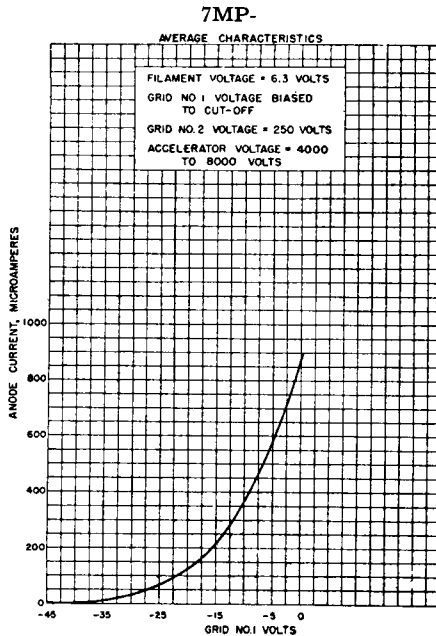
Anode Voltage	4,000	7,000	Volts D-C
Grid No. 2 Voltage	250	250	Volts D-C
Grid No. 2 Current	-15 to +15	-15 to +15	ua. D-C
Grid No. 1 Voltage ²	-27 to -63	-27 to -63	Volts D-C
Focusing Coil Current ³	$64 \pm 15\%$	$85 \pm 15\%$	Ma. D-C
Spot Position ⁴	12	—	mm

MAXIMUM CIRCUIT VALUES

Grid No. 1 Circuit Resistance 1.5 Max. Megohms

NOTES

1. At or near this rating, the effective resistance of the anode supply should be adequate to limit the anode input power to 6 watts.
2. Visual extinction of undeflected focused spot.
3. For JETEC standard focus coil No. 109, or equivalent, with the Grid No. 1 voltage adjusted to produce an anode current of 200 microamperes and with distance (D) from reference line to center of air gap equal to 2.75 inches.
4. The center of the undeflected, unfocused spot will fall within a circle of 12 mm. radius concentric with the center of the tube face.



TYPE 7MP-

