

# TONOTRON\* TUBES



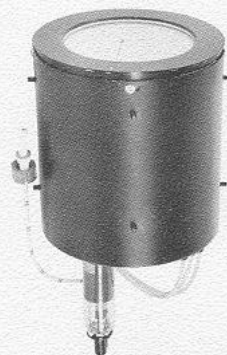
H-1027AP20



H-1027P20



7033



H-1039AP20



H-1039DP20



H-1107AP20



H-1010DP20



H-1010CP20



7222



H-1115P20

\* Tonotron is a trademark of Hughes Aircraft Company

\*\*H-1122AP20 erase time: 1 millisecond

	H-1115P20	7222	H-1010CP20	H-1010DP20 H-1107AP20 <sup>▲1</sup>	H-1027AP20 H-1027P20 7033 <sup>▲2</sup>	H-1039AP20
<b>DIAMETER NOMINAL, INCHES</b>	4	5	5	5	5	5
<b>DIAMETER MAXIMUM, INCHES</b>	4-1/16	5½	5½	6-1/16	5½	5⅞
<b>USEFUL SCREEN DIAMETER, MIN., INCHES</b>	3	4	4	4	4	4
<b>LENGTH, MAXIMUM, INCHES</b>	11	15	14⅞	14-11/32	11⅞	11
<b>POTTED(P); POTTED &amp; SHIELDED (P&amp;S)</b>	P	/	/	P&S	▲ <sup>2</sup>	P&S
<b>NUMBER OF WRITING GUNS</b>	1	1	1	1	1	1
<b>DEFLECTING METHOD</b>	ES	ES	ES	ES	EM	EM
<b>WRITING SPEED, INCHES PER SECOND ▲<sup>3</sup></b>	220K	150K	400K	150K	150K	300K
<b>WRITING SPEED, INCHES PER SECOND ▲<sup>4</sup></b>	40K	35K	70K	35K	35K	35K
<b>RESOLUTION</b> { <b>A. 10% EQUILIBRIUM BRIGHTNESS</b>	90	110	110	110	100	95
<b>LINES PER</b> { <b>B. 50% EQUILIBRIUM BRIGHTNESS</b>	75	90	85	90	75	80
<b>INCH ▲<sup>5</sup></b> { <b>C. 80% EQUILIBRIUM BRIGHTNESS</b>	60	75	75	75	60	65
<b>VIEWING TIME, SECONDS ▲<sup>6</sup></b>	60	100	75	100	60	75
<b>BRIGHTNESS, FOOT-LAMBERTS</b>	1600	1600	1700	1600	1500	1700
<b>ERASE TIME, MILLISECONDS</b>	80	80	50	80	80	80
<b>VIEWING SCREEN POTENTIAL, KILOVOLTS</b>	+8	+8	+8	+8	+8	+8
<b>VIEWING SCREEN CURRENT ▲<sup>7</sup>, MICROAMPERES</b>	450	400	600	500	375	500
<b>FLOODING GUN CATHODE CURRENT, MAX., mA</b>	2	1.5	1.5	1.5	1.5	1.5
<b>WRITING GUN CATHODE POTENTIAL, kV</b>	-2	-2.5	-2.5	-2.5	-2.5	-2.5
<b>WRITING GUN CATHODE CURRENT, MAX., μA</b>	1000	1100	1500	1500	1000	1000
<b>WRITING GUN CONTROL GRID CUT-OFF, VOLTS</b>	-30 to -70	-30 to -80	-30 to -80	-30 to -70	-30 to -90	-20 to -60
<b>AVERAGE DEFLECTING PLATE VOLTAGE</b>	100	100	100	100	/	/
<b>DEFLECTION FACTOR, VOLTS PER INCH</b>	110	80	80	75	/	/

▲<sup>1</sup> Type H-1107AP20 is self-collimating.

▲<sup>2</sup> Dimensions are for 7033. H-1027P20 has potted high voltage lead. H-1027AP20 is potted & shielded.

▲<sup>3</sup> Measured using 30 volts max. grid drive at 30% equilibrium brightness, without integration.

▲<sup>4</sup> Measured at a set beam current of 5μa and at 80% equilibrium brightness, without integration.

▲<sup>8</sup>