TYPE 6C5GT

RMA Release # 190

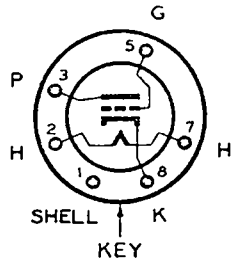
HYTRON BANTAM

June 6, 1939

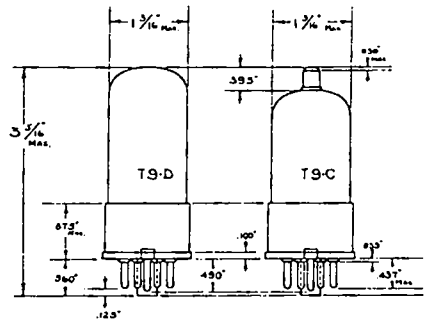
GENERAL DESCRIPTION

Application: The Hytron 6C5GTis a cathode type triode designed for service as an oscillator, amplifier, or detector. Higher values of mutual conductance and amplification factor give this tube an advantage over previous similar triodes. An internal shield is connected to the No. 1 base pin. The base is of the small octal type. This tube may be used interchangeably with the Hytron 6C5G glass tube where conditions permit larger size and additional shielding.

Physical Characteristics: Bulb T-9D



Bottom View



RATING AND CHARACTERISTICS

Heater:

Voltage	6.3	Volts AC or DC
Current	0.3	Ampere

Note: Voltage between heater and cathode should be kept at a minimum if direct connection is not possible.

AMPLIFIER OPERATION (CLASS A)

	Transformer Coupled	Resistance Coupled	
Plate Voltage	250 Max.	250*	Volts
**Grid Voltage	-8	-5 Approx.	Volts
Plate Current	8.0	1.5 Approx.	Milliamperes
Load Resistance	-	50,000 to 100,000	Ohms
Plate Resistance	10,000	-	Ohms
Mutual Conductance	2,000	-	Micromhos
Voltage Amplification	-	14	
Output Voltage (Second Harmonic 5%)	-	42	Volts
Amplification Factor	20	-	

** Grid circuit resistance should not exceed 1.0 megohm.
* Plate supply voltage. Effective plate voltage will be plate supply voltage minus voltage drop in plate resistor and should not exceed 250 volts.

DETECTOR OPERATION

	Biased Detector	Grid Leak Detector	
Plate Voltage	250 Max.	45 - 100	Volts
Grid Voltage	-17*	(Return to cathode)	Volts
Grid Leak	-	0.1 to 1.0	Megohm
Grid Condenser	-	50 to 500	µµf.

* Approximate value. Plate current should be adjusted to 0.2 milliampere at zero signal.

Direct Interelectrode Capacitances:

Grid No. 1 to Plate	1.6	µµf.
Grid No. 1 to Cathode	3.6	µµf.
Plate to Cathode	11.0	µµf.

Note: For characteristic curves refer to the type 6C5G.

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