#214 9/15/39

GENERAL DESCRIPTION

APPLICATION:

The Hytron Bantam 1B8GT is a filament type, triple-purpose diode-triode detector audio voltage amplifier and output Beam Pentode power amplifier in one envelope. The primary purpose for the combination is for the conservation of space in portable compact receivers.

The Hytron Bantam 1B8GT is a glass tube enclosed in a T9 bulb equipped with a small octal wafer base with metal sleeve. The sleeve is connected to the #1 base pin for the purpose of shielding. Electrically the 1B8GT consists of a 1H5GT and a 1T5GT mounted side by side, the filaments connected in parallel.

PHYSICAL CHARACTERISTICS: BULB T9-C Basing Designation 8AW

RATINGS AND CHARACTERISTICS

Filament Voltage (D.C.)	1.4 volts
Filament Current	0.1 amp.

(Pentode Section - Class A, Amplifier)

Plate Voltage	90	67.5	62.5	45.0	volts
Screen Voltage	90	67.5	62.5	45.0	volts
Control Grid Voltage	-6.0	-4.5	-4.5	-3.0	volts
Plate Current	6.3	4.2	4.1	2.2	ma.
Screen Current	1.4	1.2	1.2	.8	ma.
Mutual Conductance	1150	900	850	750	umhos
Load Resistance	14000	16000	16000	20000	ohms
Power Output	210	100	90	30	mw
Total Harmonic Distortion	8.5	9.5	10.5	9.5	%

(Triode Section - Class A_1 Amplifier)

Plate Voltage	90	volts
Grid Bias	0**	volts
Plate Resistance	0.24	megohm
Transconductance	275	umhos
Plate Current	0.15	ma.

(DIODE UNIT)

** The diode is located at the negative end of the filament and is independent of the triode unit and pentode unit except for the common filament.

BASE PIN CONNECTIONS

Pin 1 - Shell	Pin 6 - Triode Plate
Pin 2 - Filament +	Pin 7 - Filament -
Pin 3 - Pentode Plate	Pin 8 - Diode Plate
Pin 4 - Pentode Screen	Cap - Triode Grid
Pin 5 - Pentode Grid	

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