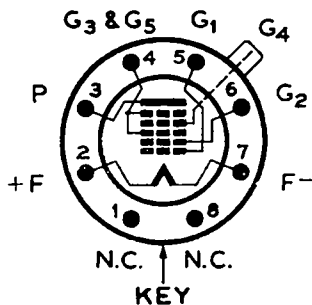


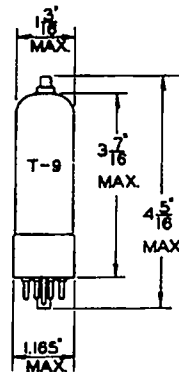
GENERAL DESCRIPTION

Application: The Ken-Rad 1B7G is a filament type pentagrid converter tube, especially designed for service in low drain battery operated receivers. The 1B7G is a glass tube equipped with an octal base.

Physical Characteristics:



Bottom View

RATING AND CHARACTERISTICS

Filament:

Voltage
Current

1.4 Volts
.100 Ampere

CONVERTER OPERATION

Plate Voltage	90	Volts
Screen Grid Voltage (Grids No. 3 and 5)	45	Volts
Anode Grid Voltage (Grid No. 2)	90	Volts
Control Grid Voltage (Grid No. 4)	0	Volts
Oscillator Grid Resistor (Grid No. 1)	200,000	Ohms
Plate Current	1.5	Milliamperes
Screen Current	1.3	Milliamperes
Oscillator Grid Current	35	Microamperes
Anode Grid Current	1.6	Milliamperes
Plate Resistance	.350	Megohm
Conversion Conductance	350	Micromhos
Conversion Conductance at -14.5 Volts	2	Micromhos Approx.
Oscillator S_m at $E_{c1} = 0$	900	Micromhos

Direct Interelectrode Capacitances: (With tube shield connected to negative filament)

Signal Grid to Mixer Plate (G4-P)	.34	μ mf.
Signal Grid to Oscillator Plate (G4-G2)	.26	μ mf.
Signal Grid to Oscillator Grid (G4-G1)	.12	μ mf.
Oscillator Grid to Oscillator Plate (G1-G2)	.90	μ mf.
Signal Input: G4 to (F+G ₁ +G ₂ +G ₃ +G ₅ +P+Shield)	7.0	μ mf.
Oscillator Output: G2 to (F+G ₁ +G ₃ +G ₄ +G ₅ +P+Shield)	4.2	μ mf.
Oscillator Input: G1 to (F+G ₂ +G ₄ +G ₅ +P+Shield)	4.0	μ mf.
Mixer Output: P to (F+G ₁ +G ₂ +G ₃ +G ₄ +G ₅ +Shield)	7.5	μ mf.

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