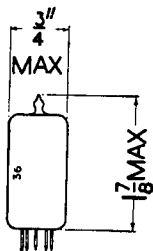
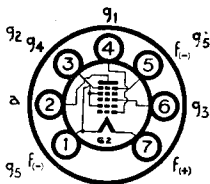


Current Equipment Type  
**TYPE 1R5**  
 MINIATURE  
 BATTERY HEPTODE  
 FREQUENCY CHANGER



B7G Base



BRIMAR type 1R5 is a miniature battery operated frequency changer particularly suitable for all-wave receivers. The control grid ( $g_2$ ) has vari-mu characteristics and A.V.C. may be applied. When used in the recommended circuits type 1R5 has a high effective oscillator slope and will operate satisfactorily at frequencies up to 20 Mc/s. Its small size and low filament drain features are particularly applicable to compact lightweight equipment.

### RATINGS

Filament Voltage	...	...	...	...	...	...	...	...	...	1.4 volts
Filament Current	...	...	...	...	...	...	...	...	...	0.05 amp.
Anode Voltage	...	...	...	...	...	...	...	...	...	90 volts max.
Screen ( $g_3, g_4$ ) Voltage	...	...	...	...	...	...	...	...	...	67.5 volts max.
Cathode Current	...	...	...	...	...	...	...	...	...	5.5 mA max.

### OPERATING CHARACTERISTICS

Anode Voltage	...	...	...	...	...	...	...	45	90	90	volts
Anode Current	...	...	...	...	...	...	...	0.7	0.8	1.6	mA
Screen Voltage	...	...	...	...	...	...	...	45	45	67.5	volts
Screen Current	...	...	...	...	...	...	...	1.9	1.9	3.2	mA
Oscillator Grid ( $g_1$ ) Resistor	...	...	...	...	...	...	...	0.1	0.1	0.1	meg.
Oscillator Grid Current	...	...	...	...	...	...	...	0.15	0.15	0.25	mA
Control Grid ( $g_2$ ) Voltage	...	...	...	...	...	...	...	0	0	0	volts
Anode Impedance	...	...	...	...	...	...	...	0.6	0.8	0.6	meg.
Conversion Conductance	...	...	...	...	...	...	...	0.24	0.25	0.3	mA/V
Control Grid Bias	...	...	...	...	...	...	...	-9	-9	-14	volts

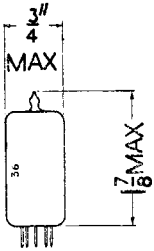
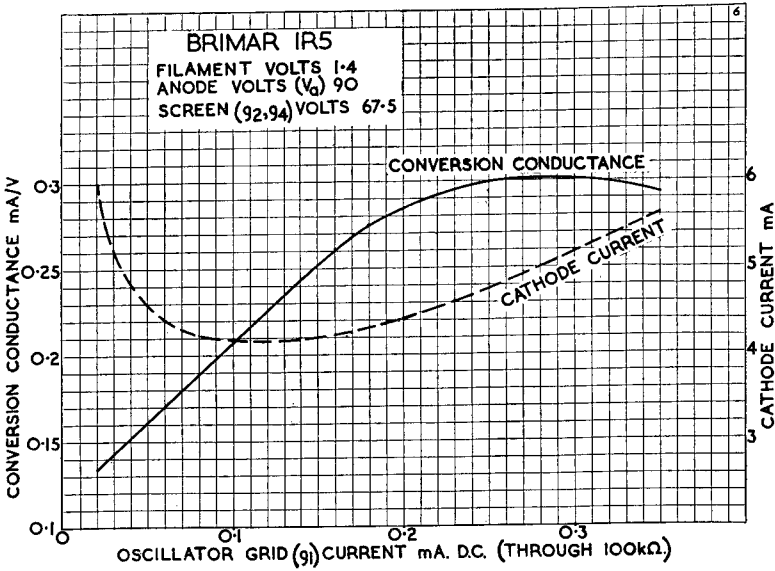
(For conversion conductance of 0.005 mA/V)

### INTER-ELECTRODE CAPACITANCES \*

R.F. Input (Control Grid to all other electrodes)	...	...	...	...	...	...	...	...	...	7.0 pF
I.F. Output (Anode to all other electrodes)	...	...	...	...	...	...	...	...	...	7.0 pF
Oscillator Input (Oscillator Grid to other electrodes)	...	...	...	...	...	...	...	...	...	3.8 pF
Control Grid to Oscillator Grid	...	...	...	...	...	...	...	...	...	0.2 pF max.
Oscillator Grid to Anode	...	...	...	...	...	...	...	...	...	0.1 pF max.
Control Grid to Anode	...	...	...	...	...	...	...	...	...	0.4 pF max.

\* With no external shield.

Type 1R5 is a commercial equivalent to the CV782.

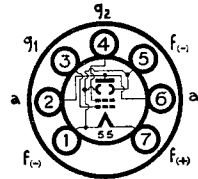


B7G Base

Replacement Type

**TYPE 1S4**

**MINIATURE BATTERY  
OUTPUT BEAM TETRODE**



BRIMAR type 1S4 is one of the range of miniature battery valves introduced for replacement use in existing "personal" receivers. It has now been superseded by type 3S4.

**RATINGS**

Filament Voltage	...	...	...	...	...	...	...	1.4 volts
Filament Current	...	...	...	...	...	...	...	0.1 amp.

*For characteristics refer to type 3S4 (parallel filament connection).*

*Type 1S4 is a commercial equivalent to the CV783*