IC6

PENTAGRID CONVERTER

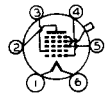
Filament	Coated	
Voltage	2.0	d-c volts
Current	0.12	amp.

Direct Interelectrode Capacitances:

Grid #4 to Plate	0.30*	μμf
Grid #4 to Grid #2	0.30*	μμf
Grid #4 to Grid #1	0.15*	μμf
Grid #1 to Grid #2	1.5	μμf
Grid #4 to All Other Electrodes (R-F Input)	10	μμf
Grid #2 to All Other Electrodes (Osc. Output)	6	μμf
Grid #1 to All Other Electrodes (Osc. Input)	6	μμf
Plate to All Other Electrodes (Mixer Output)	10	μμf

Overall Length	4-9/32" to 4-17/32"
Maximum Diameter	1-9/16"
Bulb	ST-12
Cap	Small Metal
Base	Small 6-Pin

Pin 1 - Filament +
Pin 2 - Plate
Pin 3 - Grid #2
Pin 4 - Grid #1



BOTTOM VIEW (6L)

Pin 5 - Grids #3 & #5
Pin 6 - Filament -
Cap - Grid #4

Mounting Position: Vertical◊

CONVERTER SERVICE

Plate Voltage	180 max.	volts
Screen (Grids #3 & #5) Voltage	67.5 max.	volts
Screen Supply Voltage	180 max.	volts
Anode-Grid (Grid #2) Voltage	135 max.	volts
Anode-Grid Supply Voltage	180 max.	volts
Control-Grid (Grid #4) Voltage	0 min.	volts
Plate Dissipation	0.3 max.	watt
Screen Dissipation	0.2 max.	watt
Anode-Grid Dissipation	0.4 max.	watt
Total Cathode Current	9 max.	ma.

Typical Operation:

Filament	2.0	2.0	d-c volts
Plate	135	180	volts
Screen	67.5	67.5	volts
Anode-Grid Supply	135▲	180▲	volts
Control Grid	-3	-3	volts
Osc.-Grid (Grid #1) Resistor	50000	50000	ohms
Plate Res. (approx.)	0.6	0.7	megohm
Conversion Transcond.	300	325	μmhos
Convers. Transcond. (approx.) with grid #4 bias of -14 volts	4	4	μmhos
Plate Cur.	1.3	1.5	ma.
Screen Cur.	2.5	2.0	ma.
Anode-Grid Cur.	3.1	4.0	ma.
Oscillator-Grid Cur.	0.2	0.2	ma.
Total Cathode Cur.	7.1	7.7	ma.

NOTE: The transconductance of the oscillator portion (not oscillating) is 1050 micromhos under the following conditions: plate volts, 180; screen volts, 67.5; anode-grid volts, 135; and oscillator-grid volts, 0.

* With shield-can connected to negative filament terminal.
◊ Horizontal operation permitted if pins 1 and 6 are in vertical plane.
▲ Applied through properly by-passed 20000-ohm voltage-dropping resistor.

A Typical Pentagrid Converter Circuit is shown under Type 1A6.

1C6

OPERATION CHARACTERISTICS