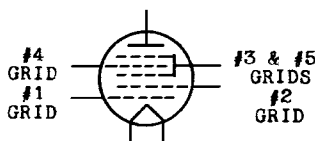


PENTAGRID CONVERTER

Filament	Coated	
Voltage	2.0	d-c volts
Current	0.060	amp.

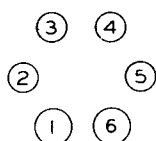
Direct Interelectrode Capacitances (approx.):

C_{g_4p}		0.25 ^o	μpf
$C_{g_4g_2}$		0.2 ^o	μpf
$C_{g_4g_1}$		0.1 ^o	μpf
$C_{g_1g_2}$		0.8	μpf
$C_{g_4(k+g_1+g_2+g_3+g_5+p)}$	= R-F Input	10.5	μpf
$C_{g_2(k+g_1+g_3+g_4+g_5+p)}$	= Osc. Output	6	μpf
$C_{g_1(k+g_2+g_3+g_4+g_5+p)}$	= Osc. Input	5	μpf
$C_{p(k+g_1+g_2+g_3+g_4+g_5)}$	= Mixer Output	9	μpf



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



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

BOTTOM VIEW

CONVERTER SERVICE

Plate Voltage	180 max.	volts
Screen (Grids #3 & #5) Voltage	67.5 max.	volts
Anode-Grid (Grid #2) Voltage	135 max.	volts
Anode-Grid Voltage Supply*	180 max.	volts
Control-Grid (Grid #4) Voltage	-3 min.	volts
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	135	135	volts
Anode-Grid Supply	135	180*	volts
Control-Grid	-3	-3	volts
Oscillator-Grid (Grid #1) Res.	50000	50000	ohms
Plate Resistance	0.4	0.5	megohm
Conversion Cond.	275	300	μmhos
Conversion Cond. at -22.5 volts on Grid #4	4	4	μmhos
Plate Current	1.2	1.3	ma.
Screen Current	2.5	2.4	ma.
Anode-Grid Current	2.3	2.3	ma.
Oscillator-Grid Cur.	0.2	0.2	ma.
Total Cathode Current	6.2	6.2	ma.

* Applied through a 20000-ohm voltage-dropping resistor, by-passed by 0.1 μf condenser ←

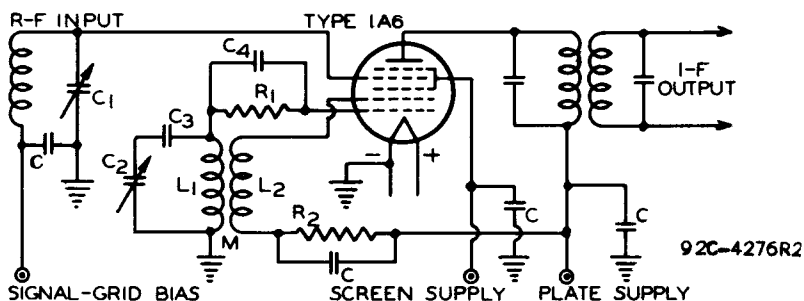
The mutual conductance of the oscillator portion (not oscillating) of the 1A6 is 425 micromhos under the following conditions: plate voltage, 135 to 180 volts; screen voltage, 67.5 volts; anode-grid voltage (no voltage-dropping resistor), 135 volts; and oscillator-grid voltage, 0 volts. Under these same conditions, the anode-grid current is 2.3 milliamperes.

^o With shield-can.

← Indicates a change

PENTAGRID CONVERTER

TYPICAL PENTAGRID CONVERTER CIRCUIT



- $C = 0.1 \mu f$
 $C_1 = \text{GANGED VARIABLE CONDENSERS}$
 $C_2 = \text{PADDING CONDENSER}$
 $C_4 = \text{GRID CONDENSER OF } 200 \mu f$
 $L_1 = \text{OSCILLATOR GRID INDUCTANCE}$
 $L_2 = \text{OSCILLATOR PLATE INDUCTANCE}$
 $M = \text{MUTUAL INDUCTANCE OF } L_1 \text{ AND } L_2$
 $R_1 = \text{OSCILLATOR GRID LEAK}$
 $R_2 = \text{VOLTAGE DROPPING RESISTOR OF } 20000 \text{ OHMS}$
 $\text{GRID \#2 VOLTS SHOULD BE HIGHER THAN SCREEN VOLTS}$

The license extended to the purchaser of tubes appears in the License Notice accompanying them. Information contained herein is furnished without assuming any obligations.

OPERATION CHARACTERISTICS

