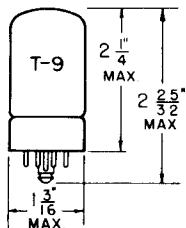


**TUNG-SOL**

**PENTAGRID CONVERTER**



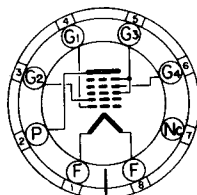
COATED FILAMENT

1.4 VOLTS 0.050 AMPERE

DC

GLASS BULB

ANY MOUNTING POSITION



**BOTTOM VIEW**

LOCKING-IN  
8-PIN BASE

THE 1LC6 IS A PENTAGRID CONVERTER, DESIGNED FOR SERVICE AS AN OSCILLATOR AND MIXER IN SUPERHETERODYNE RECEIVERS.

**RATINGS**

INTERPRETED ACCORDING TO RMA STANDARD MB-210

|                                    |     |       |
|------------------------------------|-----|-------|
| MAXIMUM PLATE VOLTAGE              | 90  | VOLTS |
| MAXIMUM SCREEN (G3 AND G5) VOLTAGE | 35  | VOLTS |
| MAXIMUM SCREEN SUPPLY VOLTAGE      | 90  | VOLTS |
| MAXIMUM TOTAL CATHODE CURRENT      | 3.0 | MA.   |
| MAXIMUM ANODE GRID (G2) VOLTAGE    | 45  | VOLTS |

**DIRECT INTERELECTRODE CAPACITANCES**

WITH EXTERNAL SHIELD CONNECTED TO NEGATIVE FILAMENT (PIN B)

|  |      |                  |
|--|------|------------------|
| SIGNAL GRID (G4) TO MIXER PLATE (P)                  | 0.28 | $\mu\mu\text{f}$ |
| SIGNAL GRID (G4) TO OSC. PLATE (G2)                  | 0.38 | $\mu\mu\text{f}$ |
| SIGNAL GRID (G4) TO OSC. GRID (G1)                   | 0.11 | $\mu\mu\text{f}$ |
| OSC. GRID (G1) TO OSC. PLATE (G2)                    | 0.6  | $\mu\mu\text{f}$ |
| SIGNAL INPUT: G4 TO ALL OTHER ELECTRODES             | 9.0  | $\mu\mu\text{f}$ |
| OSC. INPUT: G1 TO ALL OTHER ELECTRODES<br>EXCEPT G2  | 2.4  | $\mu\mu\text{f}$ |
| OSC. OUTPUT: G2 TO ALL OTHER ELECTRODES<br>EXCEPT G1 | 4.8  | $\mu\mu\text{f}$ |
| MIXER OUTPUT: P TO ALL OTHER ELECTRODES              | 5.5  | $\mu\mu\text{f}$ |

CONTINUED ON NEXT PAGE

PRINTED IN U. S. A.

PLATE  
1533  
JAN. 15  
1945

## TUNG-SOL

CONTINUED FROM PRECEDING PAGE

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

## CONVERTER SERVICE

|  |       |       |        |
|--|-------|-------|--------|
| PLATE VOLTAGE                              | 45    | 90    | VOLTS  |
| SCREEN (G3 AND G5) VOLTAGE                 | 35    | 35    | VOLTS  |
| CONTROL GRID (G4) VOLTAGE <sup>A</sup>     | 0     | 0     | VOLTS  |
| ANODE GRID (G2) VOLTAGE                    | 45    | 45    | VOLTS  |
| PLATE CURRENT                              | 0.7   | 0.75  | MA.    |
| SCREEN CURRENT                             | 0.75  | 0.7   | MA.    |
| ANODE GRID CURRENT                         | 1.4   | 1.4   | MA.    |
| OSC. GRID CURRENT                          | 0.035 | 0.035 | MA.    |
| TOTAL CATHODE CURRENT                      | 2.9   | 2.9   | MA.    |
| OSC. GRID (G4) RESISTOR                    | 0.2   | 0.2   | MEGOHM |
| CONVERSION TRANSCONDUCTANCE<br>AT EC4 = 0  | 250   | 275   | μMHOS  |
| CONVERSION TRANSCONDUCTANCE<br>AT EC4 = -2 | 50    | 50    | μMHOS  |
| CONVERSION TRANSCONDUCTANCE<br>AT EC4 = -3 | 5.0   | 5.0   | μMHOS  |
| PLATE RESISTANCE                           | 0.3   | 0.65  | MEGOHM |

<sup>A</sup> UNDER MAXIMUM RATED CONDITIONS THERE SHOULD BE A RESISTANCE OF AT LEAST 1.0 MEGOHM IN THE RETURN TO THE NEGATIVE FILAMENT PIN.