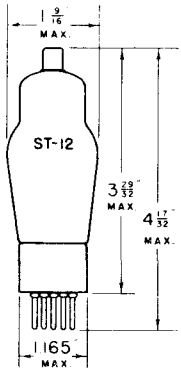
TUNG-SOL



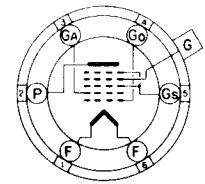
PENTAGRID CONVERTER

COATED FILAMENT

2.0 VOLTS 0.06 AMPERE
DC

GLASS BULB

SMALL 6 PIN BASE



6L

BOTTOM VIEW

THE TUNG-SOL 1A6 IS A COMBINED OSCILLATOR AND MIXER DESIGNED FOR SERVICE AS THE FIRST DETECTOR IN BATTERY OPERATED SUPERHETERODYNE RECEIVERS WHERE ECONOMY IN FILAMENT CURRENT CONSUMPTION IS DESIRED. WITH THE EXCEPTION OF CAPACITANCES ITS RATINGS AND CHARACTERISTICS ARE IDENTICAL WITH THOSE OF THE 1D7G.

OPERATING CONDITIONS AND CHARACTERISTICS

PLATE (P) VOLTAGE MAX.	180	VOLTS
SCREEN (GS) VOLTAGE MAX.	67.5	VOLTS
ANODE GRID (GA) VOLTAGE MAX.	135	VOLTS
ANODE GRID (GA) VOLTAGE SUPPLY MAX.	180 [A]	VOLTS
CONTROL GRID (G) VOLTAGE MIN.	-3	VOLTS
TOTAL CATHODE CURRENT MAX.	9	MA.

CONVERTER SERVICE

PLATE (P) VOLTAGE	135	180	VOLTS
SCREEN (GS) VOLTAGE	67.5	67.5	VOLTS
ANODE GRID (GA) VOLTAGE	135	135	VOLTS
ANODE GRID (GA) SUPPLY VOLTAGE	135	180 [A]	VOLTS
CONTROL GRID (G) VOLTAGE	-3	-3	VOLTS
OSCILLATOR GRID RESISTOR	50 000	50 000	OHMS
PLATE CURRENT	1.2	1.3	MA.
SCREEN CURRENT	2.5	2.4	MA.
ANODE GRID CURRENT	2.3	2.3	MA.
OSCILLATOR GRID CURRENT	0.2	0.2	MA.
TOTAL CATHODE CURRENT	6.2	6.2	MA.
PLATE RESISTANCE	0.4	0.5	MEGOHM
CONVERSION CONDUCTANCE	275	300	μMHOS
CONTROL GRID (G) VOLTAGE APPROX. FOR CONVERSION CONDUCTANCE = 4 μMHOS	-22.5	-22.5	VOLTS

[A] APPLIED THROUGH 20 000 OHM DROPPING RESISTOR.

PLATE 378-1

APR. 14 1939

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STATIC CHARACTERISTICS OF OSCILLATOR SECTION – NOT OSCILLATING

PLATE (P) VOLTAGE	135 TO 180	VOLTS
SCREEN (G_S) VOLTAGE	67.5	VOLTS
ANODE GRID (G_A) VOLTAGE	135	VOLTS
CONTROL GRID (G) VOLTAGE	-3	VOLTS
OSCILLATOR GRID (G_O) VOLTAGE	0	VOLTS
TRANSCONDUCTANCE – OSCILLATOR GRID (G_O) TO ANODE GRID (G_A)	425	μMHOS
ANODE GRID CURRENT	2.3	MA.

DIRECT INTERELECTRODE CAPACITANCES

CONTROL GRID (G) TO PLATE (P)[S]	0.26	μμf
CONTROL GRID (G) TO OSCILLATOR GRID (G_O)[S]	0.1	μμf
CONTROL GRID (G) TO ANODE GRID (G_A)[S]	0.2	μμf
OSCILLATOR GRID (G_O) TO ANODE GRID (G_A)	0.8	μμf
RF INPUT ELECTRODE, GRID (G) TO ALL OTHER ELECTRODES	10.5	μμf
OSC. INPUT ELECTRODE, GRID (G_O) TO ALL OTHER ELECTRODES	5.0	μμf
OSC. OUTPUT ELECTRODE, GRID (G_A) TO ALL OTHER ELECTRODES	6.0	μμf
MIXER OUTPUT ELECTRODE, PLATE (P) TO ALL OTHER ELECTRODES	9.0	μμf

[S] WITH SHIELD

PLATE 379-1