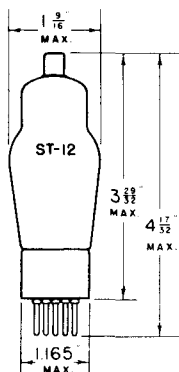


TUNG-SOL



PENTAGRID CONVERTER

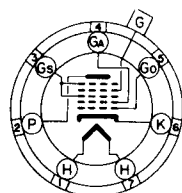
UNI-POTENTIAL CATHODE

HEATER

2A7 - 2.5 VOLTS 0.8 AMPERE

6A7 - 6.3 VOLTS 0.3 AMPERE

AC OR DC



7 C

BOTTOM VIEW

GLASS BULB

SMALL 7 PIN BASE

THE TUNG-SOL 2A7 AND 6A7 ARE PENTAGRID CONVERTERS DESIGNED FOR SERVICE AS OSCILLATORS AND MIXERS IN AC OPERATED AND AC-DC OPERATED RECEIVERS. WITH THE EXCEPTION OF HEATER RATINGS, THEY HAVE IDENTICAL RATINGS AND ELECTRICAL CHARACTERISTICS.

RATINGS

MAXIMUM PLATE (P) VOLTAGE	300	VOLTS
MAXIMUM SCREEN (Gs) SUPPLY VOLTAGE	300	VOLTS
MAXIMUM SCREEN VOLTAGE	100	VOLTS
MINIMUM EXTERNAL CONTROL GRID (G) BIAS VOLTAGE	0	VOLTS
MAXIMUM OSCILLATOR ANODE (Ga) SUPPLY VOLTAGE	300	VOLTS
MAXIMUM OSCILLATOR ANODE VOLTAGE	200	VOLTS
MAXIMUM TOTAL CATHODE CURRENT	14	MA.
MAXIMUM PLATE DISSIPATION	1.0	WATT
MAXIMUM SCREEN DISSIPATION	0.3	WATT
MAXIMUM OSCILLATOR ANODE DISSIPATION	0.75	WATT

FOR "INTERPRETATION OF RATINGS" REFER TO FRONT OF BOOK.

CONTINUED NEXT PAGE

PLATE
918-2DEC-30
1940

TUNG-SOL

DIRECT INTERELECTRODE CAPACITANCES

CONTROL GRID (G) TO MIXER PLATE (P) ^S	0.3	μμf
CONTROL GRID (G) TO OSCILLATOR ANODE (G _A) ^S	0.15	μμf
CONTROL GRID (G) TO OSCILLATOR GRID (G ₀) ^S	0.15	μμf
OSCILLATOR GRID (G ₀) TO OSCILLATOR ANODE (G _A)	1.0	μμf
RF INPUT: CONTROL GRID (G) TO ALL OTHER ELECTRODES	8.5	μμf
OSCILLATOR INPUT: OSCILLATOR GRID (G ₀) TO ALL OTHER ELECTRODES	7.0	μμf
OSCILLATOR OUTPUT: OSCILLATOR ANODE (G _A) TO ALL OTHER ELECTRODES	5.5	μμf
MIXER OUTPUT: MIXER PLATE (P) TO ALL OTHER ELECTRODES	9.0	μμf

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CONVERTER SERVICE

PLATE (P) VOLTAGE	100	250	VOLTS
SCREEN (G _s) VOLTAGE	50	100	VOLTS
CONTROL GRID (G) VOLTAGE ^{MIN.}	-1.5	-3	VOLTS
OSCILLATOR ANODE (G _A) SUPPLY VOLTAGE ^A	-	250	VOLTS
OSCILLATOR ANODE VOLTAGE	100	-	VOLTS
OSCILLATOR GRID (G ₀) RESISTOR	50 000	50 000	OHMS
PLATE CURRENT	1.1	3.5	MA.
SCREEN CURRENT	1.3	2.7	MA.
OSCILLATOR ANODE CURRENT	2.0	4.0	MA.
OSCILLATOR GRID CURRENT	0.25	0.4	MA.
TOTAL CATHODE CURRENT	4.6	10.6	MA.
PLATE RESISTANCE APPROX.	0.6	0.36	MEGOHM
CONVERSION TRANSCONDUCTANCE	360	-	μMHOS
FOR CONTROL GRID (G) VOLTAGE = -1.5 V.			
CONVERSION TRANSCONDUCTANCE	180	550	μMHOS
FOR CONTROL GRID (G) VOLTAGE = -3 V.			
CONVERSION TRANSCONDUCTANCE	50	325	μMHOS
FOR CONTROL GRID (G) VOLTAGE = -6 V.			
CONVERSION TRANSCONDUCTANCE	-	100	μMHOS
FOR CONTROL GRID (G) VOLTAGE = -10 V.			
CONVERSION TRANSCONDUCTANCE APPROX.	3	-	μMHOS
FOR CONTROL GRID (G) VOLTAGE = -20 V.			
CONVERSION TRANSCONDUCTANCE APPROX.	-	6	μMHOS
FOR CONTROL GRID (G) VOLTAGE = -35 V.			

^A APPLIED THROUGH A 20 000 OHM DROPPING RESISTOR^S WITH EXTERNAL SHIELD CONNECTED TO CATHODE