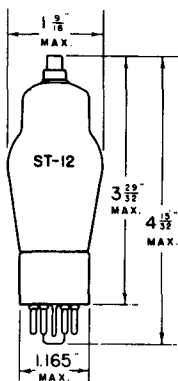


TUNG-SOL



PENTAGRID CONVERTER

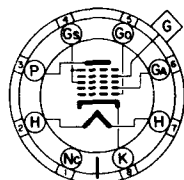
UNIPOTENTIAL CATHODE

HEATER

6.3 VOLTS 0.15 AMPERE
AC OR DC

GLASS BULB

SMALL 8 PIN OCTAL BASE



G-8A

BOTTOM VIEW

THE TUNG-SOL 6D8G IS A PENTAGRID CONVERTER DESIGNED FOR SERVICE AS AN OSCILLATOR AND MIXER IN SUPERHETERODYNE CIRCUITS. IT IS RECOMMENDED FOR USE WHERE ECONOMY OF HEATER CURRENT IS IMPORTANT.

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	13	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

TUNG-SOL

DIRECT INTERELECTRODE CAPACITANCES^S

CONTROL GRID (G) TO MIXER PLATE (P)	0.20	$\mu\mu\text{f}$
CONTROL GRID (G) TO OSCILLATOR ANODE (G _A)	0.20	$\mu\mu\text{f}$
CONTROL GRID (G) TO OSCILLATOR GRID (G _O)	0.16	$\mu\mu\text{f}$
OSCILLATOR GRID (G _O) TO OSCILLATOR ANODE (G _A)	1.1	$\mu\mu\text{f}$
RF INPUT: CONTROL GRID (G) TO ALL OTHER ELECTRODES	8.0	$\mu\mu\text{f}$
OSCILLATOR INPUT: OSCILLATOR GRID (G _O) TO ALL ELECTRODES EXCEPT OSCILLATOR ANODE (G _A)	5.5	$\mu\mu\text{f}$
OSCILLATOR OUTPUT: OSCILLATOR ANODE (G _A) TO ALL OTHER ELECTRODES EXCEPT OSCILLATOR GRID (G _O)	4.6	$\mu\mu\text{f}$
MIXER OUTPUT: MIXER PLATE (P) TO ALL OTHER ELECTRODES	11	$\mu\mu\text{f}$

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CONVERTER SERVICE

PLATE (P) VOLTAGE	135	250	VOLTS
SCREEN (G _s) VOLTAGE	67.5	100	VOLTS
CONTROL GRID (G) VOLTAGE ^{MIX.}	-3	-3	VOLTS
OSCILLATOR ANODE (G _A) SUPPLY VOLTAGE ^A	-	250	VOLTS
OSCILLATOR ANODE VOLTAGE	135	-	VOLTS
OSCILLATOR GRID (G _O) RESISTOR	50 000	50 000	OHMS
PLATE CURRENT	1.5	3.5	MA.
SCREEN CURRENT	1.7	2.6	MA.
OSCILLATOR ANODE CURRENT	3.0	4.3	MA.
OSCILLATOR GRID CURRENT	0.2	0.4	MA.
TOTAL CATHODE CURRENT	6.4	10.8	MA.
CONVERSION TRANSCONDUCTANCE	450	-	μMHOS
FOR CONTROL GRID (G) VOLTAGE = -2 V.			
CONVERSION TRANSCONDUCTANCE	325	550	μMHOS
FOR CONTROL GRID (G) VOLTAGE = -3 V.			
CONVERSION TRANSCONDUCTANCE	75	275	μMHOS
FOR CONTROL GRID (G) VOLTAGE = -0 V.			
CONVERSION TRANSCONDUCTANCE	35	100	μMHOS
FOR CONTROL GRID (G) VOLTAGE = -10 V.			
CONVERSION TRANSCONDUCTANCE ^{APPROX.}	5	-	μMHOS
FOR CONTROL GRID (G) VOLTAGE = -25 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 CATHODEPLATE
921-2