

TUNG-SOL

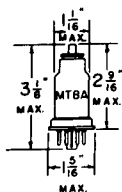
PENTAGRID CONVERTER

UNIPOTENTIAL CATHODE

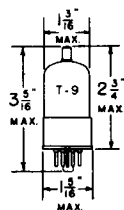
HEATER

6.3 VOLTS 0.3 AMPERE

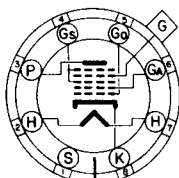
AC OR DC



METAL SHELL
8 PIN OCTAL BASE
6A8

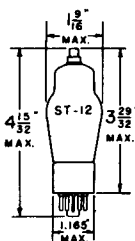


GLASS BULB
8 PIN OCTAL BASE
WITH METAL SHELL
6A8GT

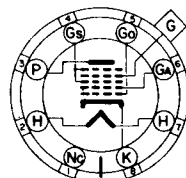


8A

BOTTOM VIEW
6A8, 6A8GT



GLASS BULB
SMALL 8 PIN OCTAL BASE
6A8G



G-8A

BOTTOM VIEW
6A8G

THE TUNG-SOL 6A8, 6A8G, AND 6A8GT ARE PENTAGRID CONVERTERS DESIGNED FOR SERVICE AS COMBINED OSCILLATORS AND MIXERS IN AC, STORAGE BATTERY, AND AC - DC OPERATED RECEIVERS. WITH THE EXCEPTION OF CAPACITANCES, THEIR RATINGS AND CHARACTERISTICS ARE IDENTICAL WITH THOSE OF THE 6A7.

RATINGS

MAXIMUM PLATE VOLTAGE	300	VOLTS
MAXIMUM SCREEN (G_s) SUPPLY VOLTAGE	300	VOLTS
MAXIMUM SCREEN VOLTAGE	100	VOLTS
MINIMUM EXTERNAL CONTROL GRID (G) BIAS VOLTAGE	0	VOLTS
MAXIMUM OSCILLATOR ANODE (G_a) 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	.75	WATT

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

TUNG-SOL

DIRECT INTERELECTRODE CAPACITANCES ^S

	6A8	6A8G, 6A8GT	
CONTROL GRID (G) TO MIXER PLATE (P)	0.06	.26	$\mu\mu\text{f}$
CONTROL GRID (G) TO OSCILLATOR ANODE (G _A)	0.1	.19	$\mu\mu\text{f}$
CONTROL GRID (G) TO OSCILLATOR GRID (G ₀)	0.09	.16	$\mu\mu\text{f}$
OSCILLATOR GRID (G ₀) TO OSCILLATOR ANODE (G _A)	0.8	1.1	$\mu\mu\text{f}$
RF INPUT: CONTROL GRID (G) TO ALL OTHER ELECTRODES	12.0	9.5	$\mu\mu\text{f}$
OSCILLATOR INPUT: OSCILLATOR GRID (G ₀) TO ALL OTHER ELECTRODES	6.5	6.0	$\mu\mu\text{f}$
OSCILLATOR OUTPUT: OSCILLATOR ANODE (G _A) TO ALL OTHER ELECTRODES	5	4.6	$\mu\mu\text{f}$
MIXER OUTPUT: MIXER PLATE (P) TO ALL OTHER ELECTRODES	12	12	$\mu\mu\text{f}$

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CONVERTER SERVICE

PLATE (P) VOLTAGE	100	250	VOLTS
SCREEN (G _s) VOLTAGE	50	100	VOLTS
CONTROL GRID (G) VOLTAGE ^{MIX.}	-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	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 OR SHELL CONNECTED TO CATHODEPLATE
1079-1