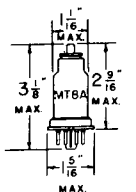
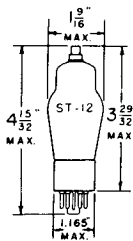


TUNG-SOL

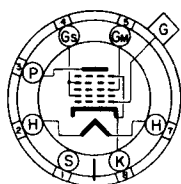


METAL SHELL  
7 PIN OCTAL BASE  
6L7

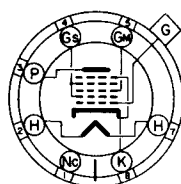
PENTAGRID MIXER  
UNIPOTENTIAL CATHODE  
HEATER  
6.3 VOLTS 0.3 AMPERE  
AC OR DC



GLASS BULB  
SMALL 7 PIN OCTAL BASE  
6L7G



7T  
BOTTOM VIEW  
6L7



G-7T  
BOTTOM VIEW  
6L7G

THE TUNG-SOL 6L7 AND 6L7G IS A MIXER TUBE DESIGNED FOR SERVICE WITH A SEPARATE OSCILLATOR AS THE FIRST DETECTOR IN SUPERHETERODYNE RECEIVERS. THE CONTROL GRID (G) IS OF THE REMOTE CUT-OFF TYPE WHICH ALLOWS THE USE OF A.V.C. AND MINIMIZES CROSS-MODULATION. THE CONTROL GRID (GM) IS OF THE SHARP CUT-OFF TYPE. THE TUBE MAY BE USED AS A VOLUME EXPANDER OR AS A DOUBLY CONTROLLED GENERAL PURPOSE AMPLIFIER.

RATINGS

CLASS A<sub>1</sub> AMPLIFIER

MAXIMUM PLATE VOLTAGE	300	VOLTS
MAXIMUM SCREEN VOLTAGE	100	VOLTS
MAXIMUM PLATE DISSIPATION	1.5	WATTS
MAXIMUM SCREEN DISSIPATION	1.0	WATT

MIXER

MAXIMUM PLATE VOLTAGE	300	VOLTS
MAXIMUM SCREEN VOLTAGE	150	VOLTS
MAXIMUM PLATE DISSIPATION	1.0	WATT
MAXIMUM SCREEN DISSIPATION	1.5	WATTS

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

CONTINUED NEXT PAGE

## TUNG-SOL

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A<sub>1</sub> AMPLIFIER

PLATE VOLTAGE	250	VOLTS
SCREEN (G <sub>s</sub> ) VOLTAGE	100	VOLTS
CONTROL GRID (G <sub>M</sub> ) VOLTAGE	-3	VOLTS
CONTROL GRID (G) VOLTAGE	-3	VOLTS
PLATE CURRENT	5.3	MA.
SCREEN CURRENT	6.5	MA.
PLATE RESISTANCE <sup>APPROX.</sup>	0.6	MEGOHM
TRANSCONDUCTANCE <sup>A</sup>	1100	μMHOS
AMPLIFICATION FACTOR <sup>APPROX.</sup>	670	
TRANSCONDUCTANCE <sup>A</sup>	475	μMHOS
FOR CONTROL GRIDS (G & G <sub>M</sub> ) VOLTAGES = -6 VOLTS		
TRANSCONDUCTANCE <sup>A</sup>	75	μMHOS
FOR CONTROL GRIDS (G & G <sub>M</sub> ) VOLTAGES = -10 VOLTS		
TRANSCONDUCTANCE <sup>A</sup> <sup>APPROX.</sup>	5	μMHOS
FOR CONTROL GRIDS (G & G <sub>M</sub> ) VOLTAGES = -15 VOLTS		

<sup>A</sup> TRANSCONDUCTANCE BETWEEN THE CONTROL GRID (G) AND THE PLATE (P).

## MIXER

PLATE VOLTAGE	250	250	VOLTS
SCREEN (G <sub>s</sub> ) VOLTAGE	100	150	VOLTS
OSCILLATOR GRID (G <sub>M</sub> ) VOLTAGE	-10	-15	VOLTS
PEAK OSCILLATOR VOLTAGE APPLIED TO (G <sub>M</sub> ) <sup>MIX.</sup>	12	18	VOLTS
CONTROL GRID (G) VOLTAGE <sup>MIX.</sup>	-3	-6	VOLTS
PLATE CURRENT	2.4	3.3	MA.
SCREEN CURRENT	7.1	9.2	MA.
PLATE RESISTANCE	GREATER THAN 1.0 MEGOHM		
CONVERSION TRANSCONDUCTANCE	375	-	μMHOS
FOR CONTROL GRID (G) VOLTAGE = -3 VOLTS			
CONVERSION TRANSCONDUCTANCE	225	350	μMHOS
FOR CONTROL GRID (G) VOLTAGE = -6 VOLTS			
CONVERSION TRANSCONDUCTANCE	30	75	μMHOS
FOR CONTROL GRID (G) VOLTAGE = -15 VOLTS			
CONVERSION TRANSCONDUCTANCE	5	15	μMHOS
FOR CONTROL GRID (G) VOLTAGE = -30 VOLTS			
CONVERSION TRANSCONDUCTANCE	-	5	μMHOS
FOR CONTROL GRID (G) VOLTAGE = -45 VOLTS			

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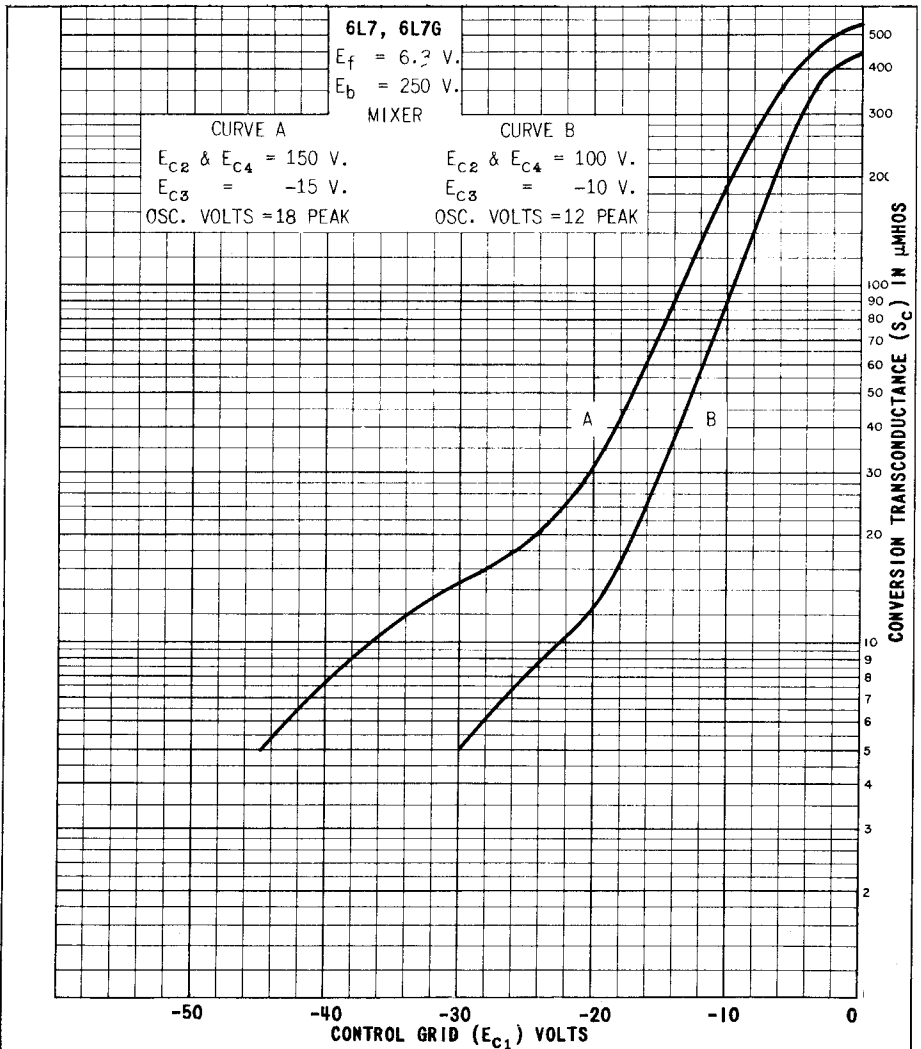
## TUNG-SOL

### DIRECT INTERELECTRODE CAPACITANCES

	6L7 <sup>A</sup>	6L7G <sup>B</sup>	
GRID (G) TO GRID (G <sub>M</sub> ) <sup>MAX.</sup>	0.20	0.20	μf
GRID (G) TO PLATE <sup>MAX.</sup>	0.001	0.005	μf
GRID (G <sub>M</sub> ) TO PLATE	0.10 <sup>MAX.</sup>	0.24	μf
GRID (G) TO ALL OTHER ELECTRODES	7.5	6	μf
GRID (G <sub>M</sub> ) TO ALL OTHER ELECTRODES	10	12	μf
PLATE TO ALL OTHER ELECTRODES	11	10	μf

<sup>A</sup> WITH SHELL CONNECTED TO CATHODE

<sup>B</sup> WITH EXTERNAL SHIELD CONNECTED TO CATHODE



# 6L7, 6L7G

**6L7, 6L7G**  
 $E_f = 6.3 \text{ V.}$   
 $E_{C2} \text{ \& } E_{C4} = 100 \text{ V.}$   
 $E_b = 250 \text{ V.}$

--- AVC CHARACTERISTIC

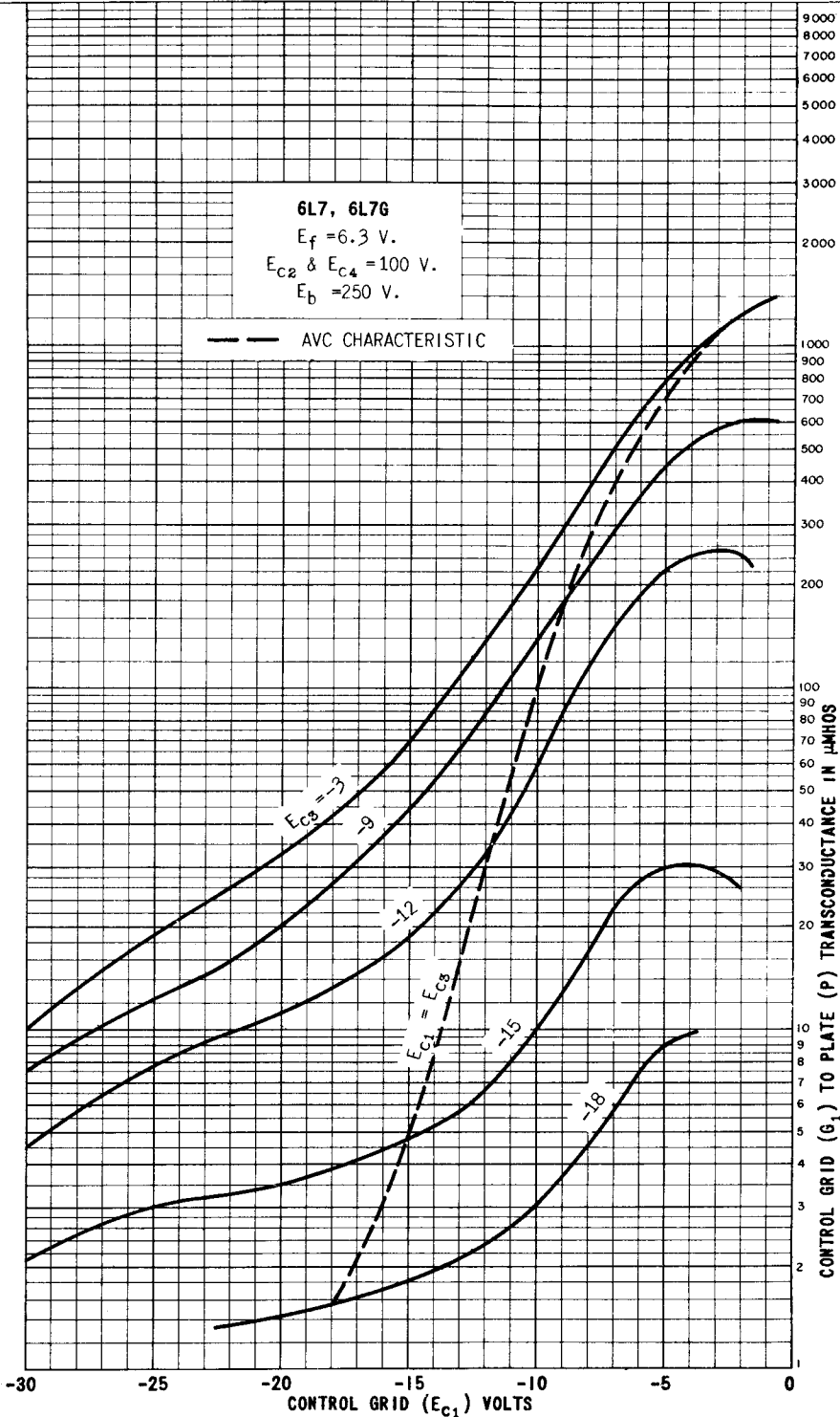


PLATE 925-1