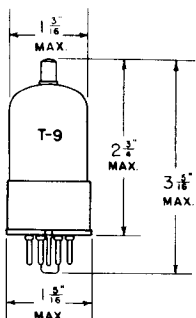


## TUNG-SOL



**DUO-DIODE**  
**HIGH MU TRIODE AMPLIFIER**

UNIPOTENTIAL CATHODE

HEATER  
 12.6 VOLTS 0.15 AMPERE  
 AC OR DC



7 V  
 BOTTOM VIEW

GLASS BULB

SMALL WAFER 7 PIN OCTAL BASE WITH METAL SHELL

THE TUNG-SOL 12Q7GT COMBINES TWO DIODES AND A HIGH MU TRIODE IN A SINGLE BULB, USING A COMMON CATHODE. IT IS DESIGNED FOR SERVICE AS A DIODE DETECTOR, AVC RECTIFIER, AND A HIGH GAIN RESISTANCE COUPLED AMPLIFIER IN AC - DC OPERATED RECEIVERS USING 150 MA. HEATER TUBES.

RATINGS

MAXIMUM PLATE VOLTAGE	300	VOLTS
MINIMUM DIODE CURRENT WITH 10 VOLTS DC APPLIED PER PLATE	0.8	MA.

AVERAGE CHARACTERISTICS OF TRIODE UNIT

PLATE VOLTAGE	100	250	VOLTS
CONTROL GRID VOLTAGE	-1	-3	VOLTS
PLATE CURRENT	0.8	1.0	MA.
PLATE RESISTANCE	58000	58000	OHMS
TRANSCONDUCTANCE	1200	1200	μMHOS
AMPLIFICATION FACTOR	70	70	

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

CONTINUED NEXT PAGE

## TUNG-SOL

### TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

ZERO BIAS, RESISTANCE COUPLED, CLASS A<sub>1</sub> AMPLIFIER

PLATE SUPPLY VOLTAGE	100	300	VOLTS
PLATE LOAD RESISTOR	0.25	0.25	MEGOHM
GRID RESISTOR	10	10	MEGOHM
COUPLING CONDENSER	.01 TO .005	.01 TO .005	μf
GRID RESISTOR FOR FOLLOWING TUBE	.5 TO 1.0	.5 TO 1.0	MEGOHM
EXTERNAL GRID CIRCUIT IMPEDANCE	0	0	C
VOLTAGE GAIN	40	42	50
VOLTAGE OUTPUT (RMS) <sup>A</sup>	11	13	58
			VOLTS

<sup>A</sup> AT 5% TOTAL HARMONIC DISTORTION.

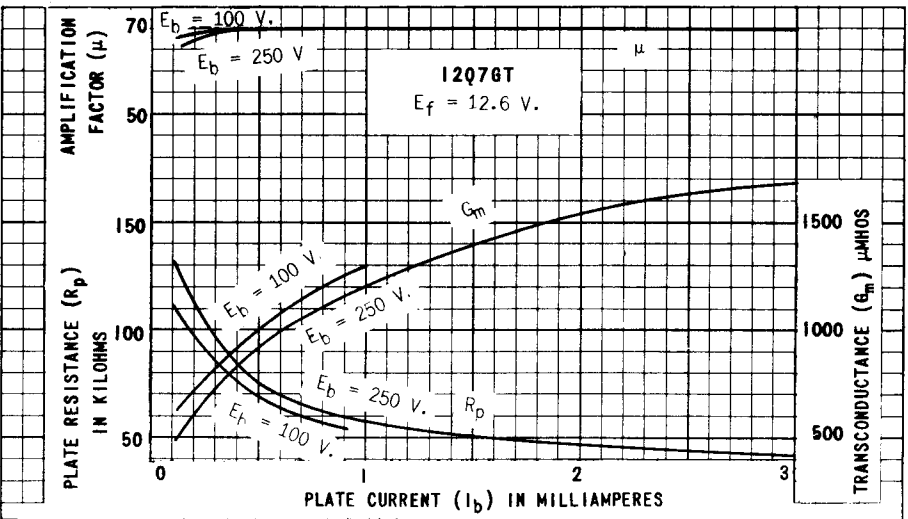
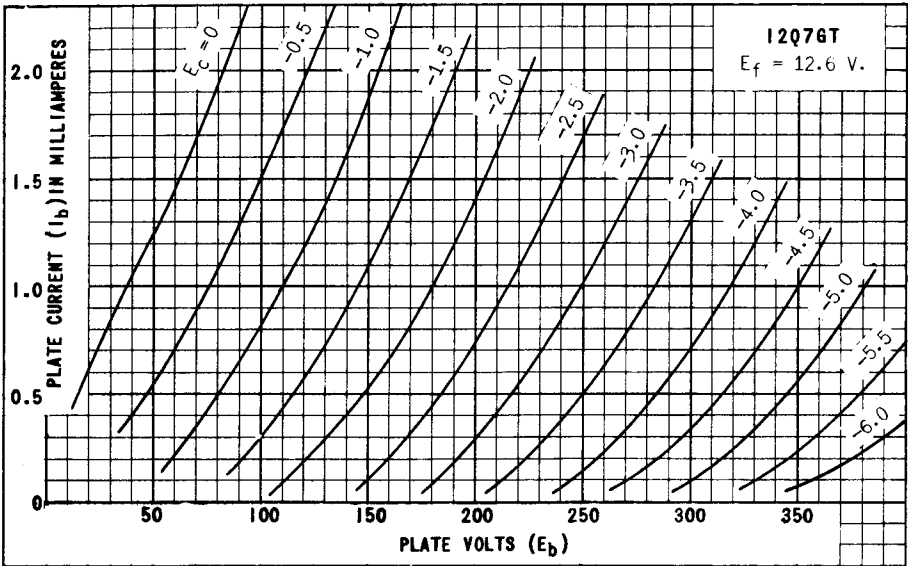


PLATE  
1119-1