AMALGAMATED WIRELESS VALVE COMPANY

DOUBLE DIODE REMOTE CUT-OFF PENTODE (G.T. TYPE)

(Tentative Data)

Type 6AR7-GT is a self-shielded G.T. multi-unit tube containing two diodes and a remote cut-off pentode in one envelope. It is intended for use as a combined amplifier, detector and A.V.C. tube.

GENERAL DATA

ELECTRICAL

Heater, for unipotential cathode

Voltage (a.c. or d.c.)	6.3 volts
Current	0.3 ampere

Direct Interelectrode Capacitances *

Pentode Unit

Grid No. 1 to plate (C_{g1p})	.003 μμf max.
Input C_{g1} (K+h+g2+g3+internal shield)	5.5 μμf
Output C_p (K+h+g2+g3+internal shield)	7.5 μμf

Diode Units

Diode No. 1 - Diode No. 2	0.3 μμf max.

MECHANICAL

Mounting position	any
Maximum overall length	3-5/8"
Maximum seated length	3-1/16"
Maximum diameter	1-5/16"
Bulb	T9
Cap	Skirted miniature - Style C
Base	Small Wafer Octal 8 pin, sleeve

Basing Designation

Pin 1 Heater
Pin 2 Base shield and metal shell
Pin 3 Pentode plate
Pin 4 Grid No. 2 (Screen grid)
Pin 5 Diode No. 2
Pin 6 Diode No. 1
Pin 7 Cathode, Grid No. 3 and Internal shields
Pin 8 Heater
Cap Grid No. 1

*With no additional external shield.

PENTODE UNIT

MAXIMUM RATINGS, DESIGN-CENTER VALUES

Plate voltage	300 max.
Grid No. 2 (Screen) voltage	125 max.
Grid No. 2 Supply voltage	300 max.
Plate Dissipation	2.25 max. watts
Screen dissipation	0.35 max. watts
Grid No. 1 (Control grid) voltage	
Negative bias value	0 min. volts
Peak Heater-Cathode voltage:	
Heater negative with respect to cathode	90 max. volts
Heater positive with respect to cathode	90 max. volts

TYPICAL OPERATION AND CHARACTERISTICS-CIASS A1 AMPLIFIER

Plate voltage	250 volts
Grid No. 2 voltage	100 volts
Grid No. 1 voltage	-2.0 volts
Transconductance	2500 micromhos
Grid No. 1 voltage (approx.)	
for a transconductance of 20 micromhos	-25 volts
Plate current	7.0 ma.
Grid No. 2 current	1.8 ma.
Plate resistance	1.2 megohm

DIODE UNITS

The two diode plates are placed around a cathode, the sleeve of which is common to the pentode unit. Each diode plate has its own base pin. The minimum diode current per plate with an applied d.c. voltage of 10 volts is 0.8 milliampere.