TUNG-SOL

DUO-DIODE-TRIODE
MINIATURE TYPE

COATED UNIPOTENTIAL CATHODE

HEATER
12.6 VOLTS 0.15 AMP.
AC OR DC
ANY MOUNTING POSITION

BOTTOM VIEW
MINIATURE 7 PIN BASE
7BT

GLASS BULB

THE 12FT6 IS A DUO-DIODE-TRIODE IN THE 7 PIN MINIATURE CONSTRUCTION. IT IS INTENDED FOR USE AS THE SECOND DETECTOR AND AUDIO DRIVER AMPLIFIER IN HYBRID (TUBE AND TRANSISTOR) AUTOMOBILE RADIO RECEIVERS THAT OPERATE WITH "A" AND "B" SUPPLY DIRECTLY FROM A 12-VOLT STORAGE BATTERY.

DIRECT INTERELECTRODE CAPACITANCES

GRID TO PLATE 2.0 \(\mu\mu\text{f}\
INPUT 1.8 \(\mu\mu\text{f}\
OUTPUT 1.1 \(\mu\mu\text{f}\
DIODE 1 TO DIODE 2 0.9 \(\mu\mu\text{f}\

RATINGS
INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HEATER VOLTAGE 12.6 VOLTS
MAXIMUM PLATE VOLTAGE 30 VOLTS
MAXIMUM CATHODE CURRENT 20 MA.
MAXIMUM AVERAGE DIODE CURRENT 1 MA.
MAXIMUM GRID #1 RESISTANCE 10 MEGOHMS
MAXIMUM PEAK HEATER TO CATHODE VOLTAGE \(\pm 30\) VOLTS

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS
CLASS A AMPLIFIER

TRIODE UNIT
HEATER VOLTAGE 12.6 VOLTS
HEATER CURRENT 0.15 AMP.
PLATE VOLTAGE 12.6 12.6 VOLTS
GRID #1 VOLTAGE 0 --- VOLTS
GRID #1 CIRCUIT RESISTANCE 2.2 MEGOHMs
PLATE RESISTANCE (APPROX.) 1900 13 000 OHMS
TRANSCONDUCTANCE 1900 14.0 MUMHOS
AMPLIFICATION FACTOR 2.0 0.6 MA.

DIODE UNITS
AVERAGE DIODE CURRENT WITH 10 VOLTS APPLIED (EA. DIODE) 3.0 MA.

THIS TUBE IS INTENDED TO BE USED IN AUTOMOTIVE SERVICE FROM A NOMINAL 12 VOLT BATTERY SOURCE. THE HEATER IS THEREFORE DESIGNED TO OPERATE OVER THE 10.0 TO 12.9 VOLTAGE RANGE ENCOUNTERED IN THIS SERVICE. THE MAXIMUM RATINGS OF THE TUBE PROVIDE FOR AN ADEQUATE SAFETY FACTOR SUCH THAT THE TUBE WILL WITHSTAND THE WIDE VARIATION IN SUPPLY VOLTAGES.

TUNG-SOL ELECTRIC INC. ELECTRON TUBE DIVISION BLOOMFIELD, NEW JERSEY, U.S.A. FEBRUARY 1, 1959 PLATE #5422