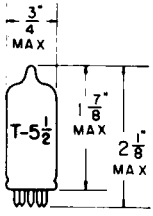
TUNG-SOL

DUO-DIODE-TRIODE

MINIATURE TYPE



GLASS BULB

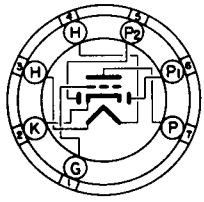
COATED UNIPOTENTIAL CATHODE

HEATER

12.6 VOLTS 0.15 AMP.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

MINIATURE
7 PIN BASE

7BT

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	μμf
INPUT	1.8	μμf
OUTPUT	1.1	μμf
DIODE 1 TO DIODE 2	0.9	μμf

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	±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	0	2.2	MEGOHM
PLATE RESISTANCE (APPROX.)	7600	13 000	OHMS
TRANSCONDUCTANCE	1900	1 000	μMHOS
AMPLIFICATION FACTOR	15.0	14.0	
PLATE CURRENT	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 15.9 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.