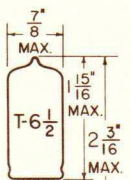


TUNG-SOL

DOUBLE DIODE TRIODE

MINIATURE TYPE



GLASS BULB

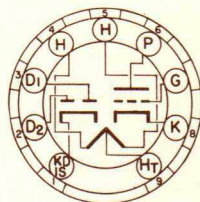
COATED UNIPOTENTIAL CATHODE

HEATER

12.6 VOLTS 0.15 AMP.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

MINIATURE BUTTON
9 PIN BASE

9 J Y

THE 12DV7 IS A DOUBLE DIODE, MEDIUM-MU TRIODE IN THE 9 PIN MINIATURE CONSTRUCTION. IT IS INTENDED FOR USE AS A SECOND DETECTOR AUDIO AMPLIFIER IN APPLICATIONS WHERE THE HEATER AND PLATE VOLTAGES ARE OBTAINED DIRECTLY FROM AN AUTOMOTIVE STORAGE BATTERY.

DIRECT INTERELECTRODE CAPACITANCES
WITHOUT EXTERNAL SHIELD

GRID TO PLATE	1.6	$\mu\mu\text{f}$
INPUT: G TO (H TK)	1.3	$\mu\mu\text{f}$
OUTPUT: P TO (H TK)	0.38	$\mu\mu\text{f}$
DIODE PLATE #1 TO GRID (MAX.)	0.005	$\mu\mu\text{f}$
DIODE PLATE #2 TO GRID (MAX.)	0.005	$\mu\mu\text{f}$
DIODE PLATE #1 TO		
DIODE PLATE #2 (MAX.)	0.17	$\mu\mu\text{f}$

RATINGS

INTERPRETED ACCORDING TO DESIGN MAXIMUM VALUES^A

HEATER VOLTAGE ^B	12.6	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE:		
HEATER NEGATIVE WITH RESPECT TO CATHODE	16	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE	16	VOLTS
MAXIMUM PLATE VOLTAGE	16	VOLTS
MAXIMUM CATHODE CURRENT	20	MA.
MAXIMUM GRID CIRCUIT RESISTANCE	10	MEGOHMS
MAXIMUM AVERAGE DIODE CURRENT (EACH DIODE)	1.0	MA.

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A₁ AMPLIFIER

HEATER VOLTAGE	12.6	VOLTS
PLATE VOLTAGE	12.6	VOLTS
GRID VOLTAGE ^C		
GRID RESISTOR	2.2	MEGOHMS
PLATE CURRENT	400	μA
TRANSCONDUCTANCE	750	μMHOS
AMPLIFICATION FACTOR	14	
PLATE RESISTANCE	19 000	OHMS
EC FOR I _b = 10 μA. (APPROX.)	-2	VOLTS
AVERAGE DIODE CURRENT WITH 10 VOLTS APPLIED (EACH DIODE) ^D	1.3	MA.

^A DESIGN-MAXIMUM RATINGS ARE LIMITING VALUES OF OPERATING AND ENVIRONMENTAL CONDITIONS APPLICABLE TO A BOGEY ELECTRON DEVICE OF A SPECIFIED TYPE AS DEFINED BY ITS PUBLISHED DATA, AND SHOULD NOT BE EXCEEDED UNDER THE WORST PROBABLE CONDITIONS. THE DEVICE MANUFACTURER CHOOSES THESE VALUES TO PROVIDE ACCEPTABLE SERVICEABILITY OF THE DEVICE, TAKING RESPONSIBILITY FOR THE EFFECTS OF CHANGES IN OPERATING CONDITIONS DUE TO VARIATIONS IN DEVICE CHARACTERISTICS. THE EQUIPMENT MANUFACTURER SHOULD DESIGN SO THAT INITIALLY AND THROUGHOUT LIFE NO DESIGN-MAXIMUM VALUE FOR THE INTENDED SERVICE IS EXCEEDED WITH A BOGEY DEVICE UNDER THE WORST PROBABLE OPERATING CONDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, SIGNAL VARIATION, AND ENVIRONMENTAL CONDITIONS.

^B 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.

^C AVERAGE CONTACT POTENTIAL BIAS DEVELOPED ACROSS SPECIFIED GRID RESISTOR.

^D TEST CONDITION ONLY.