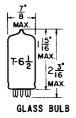
## DOUBLE DIODE TRIODE

MINIATURE TYPE



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 INPUT: G TO ( H TK ) OUTPUT: P TO (H TK) DIODE PLATE #1 TO GRID (MAX.) DIODE PLATE #2 TO GRID (MAX.)	1.6 1.3 0.38 0.005 0.005	րդս f րդս f րդս f րդս f
D'IODE PLATE #1 TO D'IODE PLATE #2 (MAX.)	0.17	щf

## $\begin{array}{c} \textbf{RATINGS} \\ \textbf{Interpreted according to design maximum values}^{A} \end{array}$

REATER 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 PLATE VOLTAGE	12.6 12.6	VCLTS VOLTS
GRID VOLTAGE <sup>C</sup>	12.0	10213
GRID RESISTOR	2.2	MEGOHMS
PLATE CURRENT	400	μΑ
TRANSCONDUCTANCE	750	μ <b>м</b> HOS
AMPLIFICATION FACTOR	14	,
PLATE RESISTANCE	19 000	OHMS
EC FOR ID = 10 $\mu$ A. (APPROX.)	-2	VOLTS
AVERAGE DIODE CURRENT WITH 10 VOLTS		
APPLIED (EACH DIODE) <sup>D</sup>	1.3	MA.

BY
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.

 $^{
m C}_{
m AVERAGE}$  contact potential bias developed across specified grid resistor.

DTEST CONDITION ONLY.

DESIGN-MAXIMUM RATINGS ARE LIMITING VALUES OF OPERATING AND ENVIRONMENTAL CONDITIONS APPLICABLE TO A BOGET ELECTRON DEVICE OF A SPECIFIED TYPE AS DEFINED BY ITS PUBLISHED DATA, AND SHOULD MOT BE EXCEEDE 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-MAXIMM VALUE FOR THE INTENDED SERVICE IS EXCEEDED WITH A BOGEY DEVICE UNDER THE WORST PROBABLE OPPRATING CONDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, SIGNAL VARIATION, AND ENVIRONMENTAL CONDITIONS.