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.)
DIODE PLATE #1 TO DIODE PLATE #2 (MAX.)

1.6 µµµf
1.3 µµµf
0.38 µµµf
0.005 µµµf
0.005 µµµf
0.17 µµµf

RATINGS
INTERPRETED ACCORDING TO DESIGN MAXIMUM VALUES

HEATER VOLTAGE
MAXIMUM HEATER—CATHODE VOLTAGE:
HEATER NEGATIVE WITH RESPECT TO CATHODE
HEATER POSITIVE WITH RESPECT TO CATHODE
MAXIMUM PLATE VOLTAGE
MAXIMUM CATHODE CURRENT
MAXIMUM GRID CIRCUIT RESISTANCE
MAXIMUM AVERAGE DIODE CURRENT (EACH DIODE)

12.6 VOLTS
16 VOLTS
16 VOLTS
16 VOLTS
20 MA.
10 MEGOHMS
1.0 MA.
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
TRANSCONDUC TANCE 750 ΜMHO
AMPLIFICATION FACTOR 14
PLATE RESISTANCE 19 000 OHMS
EC FOR IB = 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 CHOSES 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.