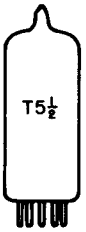
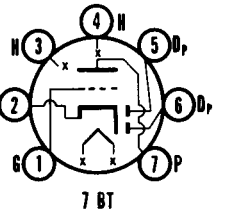


SYLVANIA TYPE 12FK6



MECHANICAL DATA

Bulb	T-5½
Base	E7-1, Miniature Button 7-Pin
Outline	5-2
Basing	7BT
Cathode	Coated Unipotential
Mounting Position	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage[1]	12.6 Volts
Heater Current	150 Ma
Heater-Cathode Voltage (Design Maximum Values)[2]	
Heater Positive with Respect to Cathode	16 Volts
Heater Negative with Respect to Cathode	16 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid to Plate	1.6 μμf
Input: g to (h + k)	1.8 μμf
Output: p to (h + k)	0.7 μμf
Diode Plate No. 1 to Diode Plate No. 2	0.9 μμf

MAXIMUM RATINGS (Design Maximum Values)[2]

Plate Voltage	16 Volts
Grid Voltage	
Positive Value	0 Volts
Negative Value	16 Volts
Diode Current (Each Section)	1.0 Ma
Grid Circuit Resistance	10 Megohms

CHARACTERISTICS AND TYPICAL OPERATION

Plate Voltage	12.6 Volts
Grid Supply Voltage	0 Volts
Grid Resistor (Bypassed)	2.2 Megohms
Plate Current	1.3 Ma
Transconductance	1200 μmhos
Amplification Factor	7.4
Plate Resistance (approx.)	6200 Ohms
Plate Current (approx.) for Ec1 = −3 Volts	.08 Ma
Diode Current with 10 Volts DC Applied Each Diode	2 Ma

NOTES:

1. This tube is intended for use in automobile radios operated from a nominal 12 volt battery. Design of the tube is such that the heater will operate satisfactorily over the range 10.0 volts to 15.9 volts, and the maximum ratings provide a safety factor for the wide voltage variation encountered with this supply.
2. 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.

APPLICATION

The Sylvania Type 12FK6 is a miniature twin diode, low-mu triode intended for use as a combined detector, AVC rectifier and AF amplifier.
It is designed for operation where the heater, grid, and plate voltages are obtained directly from a 12 volt automotive storage battery.