SYLVANIA

JETEC Registration Data

TYPE 6BF7A

DOUBLE TRIODE

The Type 6BF7A is a subminiature medium-mu double triode, designed for service where severe conditions of mechanical shock and vibration are encountered.

MECHANICAL DATA

GENERAL

Style ..... subminiature
Cathode ..... coated unipotential
Bulb T-3
Base ..... E8-10, Subminiature Button Flexible Leads
Outline 3-2
Basing 8DG
Connections:

Lead 1 - #2 plate	Lead 5 - #1 cathode
Lead 2 - #2 grid	Lead 6 - heater
Lead 3 - heater	Lead 7 - #1 grid
Lead 4 - #2 cathode	Lead 8 - #1 plate

Maximum Diameter ..... 0.400 inch
Maximum Overall Bulb Length 1.500 inches
Minimum Lead Length ..... 1.500 inches
Mounting Position ..... any

RATINGS(1)

Maximum Impact Acceleration(2) ... 450 g
Maximum Vibrational Acceleration For Extended Periods(3) ..... 2.5 g
Maximum Bulb Temperature ..... 250 °C

ELECTRICAL DATA

GENERAL

Heater Voltage (ac or dc) ..... 6.3 volts
Heater Current ..... 300 ma

Direct Interelectrode Capacitances:

	Unshielded	Shielded(4)
Grid to Plate (each section)	1.5	1.5 μμf
Input (each section)..	2.0	2.0 μμf
Output:		
Section 1	0.28	1.6 μμf
Section 2	0.30	2.0 μμf
Grid to Grid	0.009	0.008 μμf
Plate to Plate	0.75	0.55 μμf

RATINGS(1)-Absolute Values

Heater Voltage ..... 6.3(±10%) volts
Maximum Plate Voltage (dc) .... 120 volts
Maximum Plate Dissipation (each section) ..... 1.1 watts
Maximum Heater-Cathode Voltage ..... ±200 volts

CHARACTERISTICS (each section)

Conditions:
Heater Voltage ..... 6.3 volts
Plate Voltage (dc) ..... 100 volts
Cathode Bias Resistor ..... 100 ohms
Plate Current ..... 8 ma
Transconductance ..... 4,800 μmhos
Amplification Factor 35

Grid Voltage for 10 μa Plate Current ..... -7.5 volts

Noise Output Voltage(5), maximum ..... 100 mv

Notes

(1) Limitations beyond which normal tube performance and tube life may be impaired.

(2) Forces in any direction as applied by the Navy Type High-Impact (Flyweight) Shock Machine for Electronic Devices, or equivalent.

(3) Vibrational forces in any direction at 60 cycles per second for a period exceeding 100 hours.

(4) With external shield of 0.405 inch diameter connected to cathode of section under test.

(5) Across plate resistor of 2,000 ohms, with applied vibrational acceleration of 15 g at 40 cycles per second, sections tied in parallel.

from RTMA release #1129, Nov. 14, 1952