Quadruple Diode

6JU8-A

The 6JU8-A is a general-purpose quadruple diode of the 9-pin miniature type designed for use in phase-detector and noise-immune color-killer circuits of color television receivers and in FM stereo multiplex equipment.

The 6JU8-A is electrically identical to the 6JU8, but is approximately 7/16" shorter for compact equipment designs.

GENERAL

ELECTRICAL

Cathode - Coated Unipotential

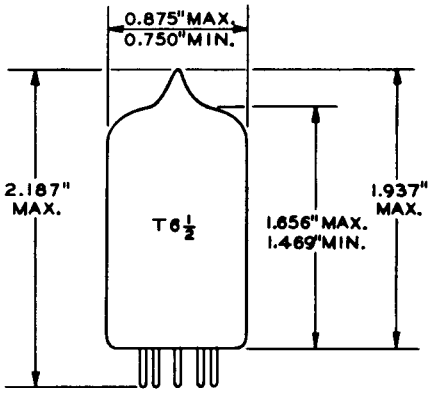
Heater Characteristics and Ratings		
Heater Voltage, AC or DC*	6.3±0.6	Volts
Heater Current‡	0.6	Amperes
Direct Interelectrode Capacitances, approximate§		
Plate (Section 1) and Cathode (Section 2) to Cathode (Section 1)	1.8	pf
Plate (Section 1) and Cathode (Section 2) to Plate (Section 2)	2.2	pf
Plate (Section 2) to Heater and Internal Shield	0.62	pf
Plate (Section 3) and Cathode (Section 4) to Cathode (Section 3)	1.9	pf
Plate (Section 3) and Cathode (Section 4) to Plate (Section 4)	2.2	pf
Plate (Section 4) to Heater and Internal Shield	0.94	pf
Cathode (Section 1) to Heater and Internal Shield	1.8	pf
Cathode (Section 3) to Heater and Internal Shield	1.9	pf

MECHANICAL

Operating Position - Any
Envelope - T-6 1/2, Glass
Base - E9-1, Small Button 9-Pin
Outline Drawing - EIA 6-2

Maximum Diameter	0.875	Inches
Minimum Diameter	0.750	Inches
Maximum Over-all Length	2.187	Inches
Maximum Seated Height	1.937	Inches

PHYSICAL DIMENSIONS

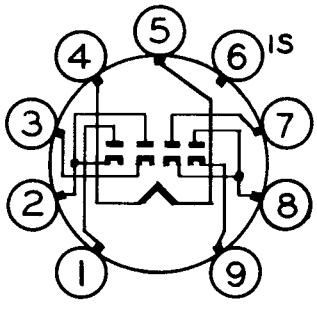


EIA 6-2

TERMINAL CONNECTIONS

Pin 1 - Plate (Section 4)
Pin 2 - Plate (Section 3) and Cathode (Section 4)
Pin 3 - Cathode (Section 3)
Pin 4 - Heater
Pin 5 - Heater
Pin 6 - Internal Shield
Pin 7 - Plate (Section 2)
Pin 8 - Plate (Section 1) and Cathode (Section 2)
Pin 9 - Cathode (Section 1)

BASING DIAGRAM



EIA 9PQ

MAXIMUM RATINGS

DESIGN-MAXIMUM VALUES, Each Section

Peak Inverse Plate Voltage	300	Volts
Steady-State Peak Plate Current	54	Milliamperes
DC Output Current	9.0	Milliamperes
Heater-Cathode Voltage		
Heater Positive with Respect to Cathode	300	Volts
Heater Negative with Respect to Cathode	300	Volts

Design-Maximum ratings are limiting values of operating and environmental conditions applicable to a bogey electron tube of a specified type as defined by its published data and should not be exceeded under the worst probable conditions.

The tube manufacturer chooses these values to provide acceptable serviceability of the tube, making allowance for the effects of changes in operating conditions due to variations in the characteristics of the tube under consideration.

The equipment manufacturer should design so that initially and throughout life no design-maximum value for the intended service is exceeded with a bogey tube under the worst probable operating conditions with respect to supply-voltage variation, equipment component variation, equipment control adjustment, load variation, signal variation, environmental conditions, and variations in the characteristics of all other electron devices in the equipment.

AVERAGE CHARACTERISTICS

Tube Voltage Drop, Each Section		
Ib = 60 Milliamperes DC	10	Volts

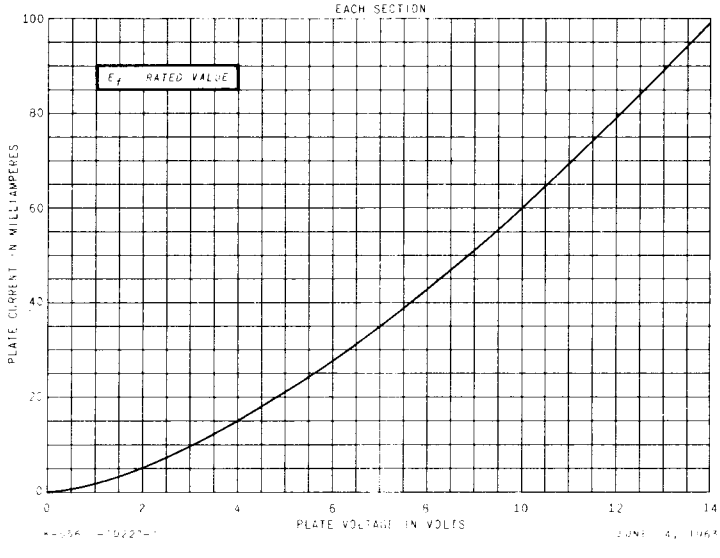
NOTES

* The equipment designer should design the equipment so that heater voltage is centered at the specified bogey value, with heater supply variations restricted to maintain heater voltage within the specified tolerance.

‡ Heater current of a bogey tube at Ef = 6.3 volts.

§ Without external shield.

AVERAGE PLATE CHARACTERISTICS
EACH SECTION



TUBE DEPARTMENT

GENERAL ELECTRIC

Owensboro, Kentucky