



# TECHNICAL DATA

## Electronic Tubes

from JEDEC release #3531,  
Dec. 18, 1961

### 6BF8

### SEXTUPLE DIODE

The 6BF8 is a miniature sextuple diode suitable for shunt-detector applications in which a number of input signals are encountered.

#### GENERAL

#### Electrical

Cathode - Coated Unipotential

#### Heater Characteristics and Ratings

Heater Voltage, AC or DC*	6.3±0.6	Volts
Heater Current†	0.45	Amperes

#### Direct Interelectrode Capacitances‡

Plate-Number 1 to Cathode and Heater	2.6	pf
Plate-Number 2 to Cathode and Heater	2.8	pf
Plate-Number 3 to Cathode and Heater	2.6	pf
Plate-Number 4 to Cathode and Heater	4.0	pf
Plate-Number 5 to Cathode and Heater	4.0	pf
Plate-Number 6 to Cathode and Heater	3.8	pf
Plate to All, Each Plate	4.4	pf

#### Mechanical

Mounting Position - Any

Envelope - T-6 1/2, Glass

Base - E9-1, Small Button 9-Pin

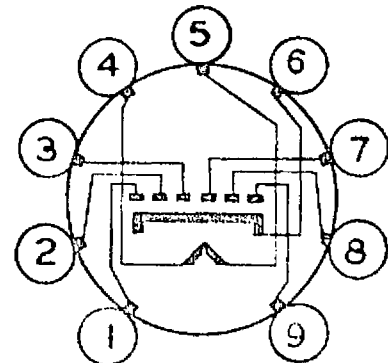
Outline Drawing - EIA 6-2

Maximum Diameter	7/8	Inches
Maximum Over-all Length	2 3/16	Inches
Maximum Seated Height	1 15/16	Inches

#### TERMINAL CONNECTIONS

Pin 1 - Plate Number 6  
Pin 2 - Plate Number 5  
Pin 3 - Plate Number 4  
Pin 4 - Heater  
Pin 5 - Heater  
Pin 6 - Cathode  
Pin 7 - Plate Number 3  
Pin 8 - Plate Number 2  
Pin 9 - Plate Number 1

#### BASING DIAGRAM



EIA 9NX

ETR-2186

MAXIMUM RATINGS

## Diode-Detector Service - Design-Maximum Values

Peak Inverse Plate Voltage	165	Volts
Peak Plate Current per Plate	11	Milliamperes
DC Output Current per Plate	2.2	Milliamperes
Heater-Cathode Voltage		
Heater Positive with Respect to Cathode	100	Volts
Heater Negative with Respect to Cathode	100	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		
I <sub>b</sub> = 5.0 Milliamperes DC per Plate	1.4	Volts

- \* The equipment designer should design the equipment so that the 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 E<sub>f</sub> = 6.3 volts.
- ‡ Without external shield.

The tubes and arrangements disclosed herein may be covered by patents of General Electric Company or others. Neither the disclosure of any information herein nor the sale of tubes by General Electric Company conveys any license under patent claims covering combinations of tubes with other devices or elements. In the absence of an express written agreement to the contrary, General Electric Company assumes no liability for patent infringement arising out of any use of the tubes with other devices or elements by any purchaser of tubes or others.