THRES

# -PRODUCT INFORMATION -

# **Compactron Diode**

**6BZ3** 

Page 1 5-66

# FOR TV DAMPING DIODE APPLICATIONS

The 6BZ3 is a compactron containing a single heater-cathode type diode intended for service as the damping diode in the horizontal-deflection circuit of television receivers.

#### GENERAL

#### **ELECTRICAL**

Cathode - Coated Unipotential

Heater Characteristics and Ratings

Heater Voltage, AC or DC\* . 6.3±0.06 Volts Heater Current . . . . 1.2 Amperes

Direct Interelectrode Capacitances, approximate§

Cathode to Plate and Heater:

k to (p + h) . . . .

Plate to Cathode and Heater:

p to (k + h) . . . .8.5 рf

Heater to Cathode: (h to k) . .

#### **MECHANICAL**

Operating Position - Any

Envelope - T-9, Glass

Base - E12-70, Button 12-Pin

Minimum Seated Height.

Outline Drawing - EIA 9-60

Maximum Diameter . 1.188 Inches Minimum Diameter 1.062 Inches Maximum Over-all Length . 2.875 Inches

Maximum Seated Height. 2.500 Inches

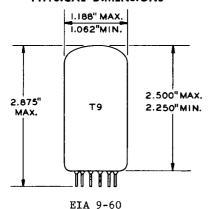
#### MAXIMUM RATINGS

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 supplyvoltage 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.

#### PHYSICAL DIMENSIONS



#### **TERMINAL CONNECTIONS**

Pin 1 - Heater

Pin 2 - No Connection

Pin 3 - No Connection

Pin 4 - Plate

Pin 5 - Internal Connection -Do Not Use

Pin 6 - Internal Connection -

Do Not Use

Pin 7 - Cathode

Pin 8 - Internal Connection -Do Not Use

Pin 9 - Internal Connection -Do Not Use

Pin 10 - Plate

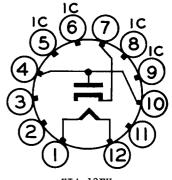
Pin 11 - No Connection

Pin 12 - Heater

### BASING DIAGRAM

2.250

Inches



EIA 12FX

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# **MAXIMUM RATINGS (Cont'd)**

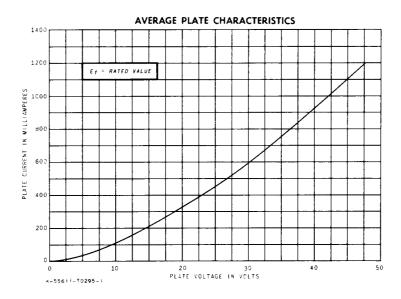
# TV DAMPER SERVICE T-DESIGN-MAXIMUM VALUES

Peak Inverse Plate Voltage Plate Dissipation		:	:	:	•	•	•	•	:	•	:	•	:	•	•	:	•	6.5 1200	Volts Watts Milliamperes Milliamperes
Heater Positive with Respect t	to	Ca	tho	de															
DC Component																		100	Volts
Total DC and Peak												•						300	Volts
Heater Negative with Respect t	to	Ca	tho	de															
DC Component																		900	Volts
Total DC and Peak																			<b>Volts</b>

## **AVERAGE CHARACTERISTICS**

#### **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.
- ¶ For operation in a 525-line, 30-frame television system as described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations", Federal Communications Commission. The duty cycle of the voltage pulse must not exceed 15 percent of one scanning cycle.



#### TUBE DEPARTMENT



Owensboro, Kentucky