

# Half-Wave Vacuum Rectifier

NOVAR TYPE

For Television Damper Service

## GENERAL DATA

**Electrical:**

Heater Characteristics and Ratings:

Voltage (AC or DC) . . . . .	6.3 ± 0.6	volts
Current at heater volts = 6.3 . . . . .	1.200	amp
Peak heater-cathode voltage:		
Heater negative with		
respect to cathode <sup>a</sup> . . . . .	5000 <sup>b</sup> max.	volts
Heater positive with		
respect to cathode. . . . .	300 <sup>c</sup> max.	volts

Direct Interelectrode Capacitances

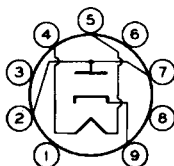
(Approx.):<sup>d</sup>

Plate to cathode and heater . . . . .	6.5	pf
Cathode to plate and heater . . . . .	9.0	pf
Heater to cathode . . . . .	2.8	pf

**Mechanical:**

Operating Position. . . . .	Any
Type of Cathode . . . . .	Coated Unipotential
Maximum Overall Length. . . . .	3.410"
Maximum Seated Length . . . . .	3.030"
Length, Base Seat to Bulb Top (Excluding tip). . . . .	2.510" to 2.690"
Diameter. . . . .	1.062" to 1.188"
Bulb. . . . .	T9
Socket. . . . .	Cinch Mfg. Co. No. 149 19 00 033, Industrial Electronic Hardware Corp. No. SO-0968-SL1, or equivalent
Base. . . . .	Small-Button Novar 9-Pin (JEDEC No. E9-75)
Basing Designation for BOTTOM VIEW. . . . .	9HP

Pin 1—Do Not Use<sup>e</sup>  
 Pin 2—Plate  
 Pin 3—Do Not Use<sup>e</sup>  
 Pin 4—Heater



Pin 5—Heater  
 Pin 6—Do Not Use<sup>e</sup>  
 Pin 7—Plate  
 Pin 8—Do Not Use<sup>e</sup>  
 Pin 9—Cathode

## DAMPER SERVICE

Maximum Ratings, Design-Maximum Values:

For operation in a 525-line, 30-frame system<sup>f</sup>

PEAK INVERSE PLATE VOLTAGE <sup>g</sup> . . . . .	5000	max.	volts
PEAK PLATE CURRENT. . . . .	1100	max.	ma
DC PLATE CURRENT. . . . .	200	max.	ma
PLATE DISSIPATION . . . . .	6	max.	watts

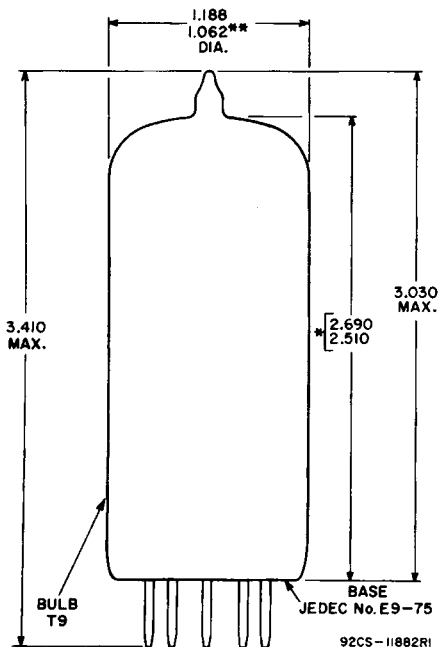


# 6BS3

## Characteristics, Instantaneous Value:

Tube Voltage Drop for plate ma. = 140 . . . . 12 volts

- a This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.
- b The dc component must not exceed 900 volts.
- c The dc component must not exceed 100 volts.
- d Without external shield.
- e Socket terminals 1, 3, 6, and 8 should not be used for tie points. It is also recommended that socket clips for these pins be removed to reduce the possibility of arc-over and to minimize leakage.
- f As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations", Federal Communications Commission.



ALL DIMENSIONS IN INCHES

\*\* APPLIES IN ZONE STARTING 0.375" FROM BASE SEAT.

\* MEASURED FROM BASE SEAT TO BULB-TOP LINE AS DETERMINED BY A RING GAUGE OF 0.600 INSIDE DIAMETER.