

Beam Power Tube

Operates at Maximum Ratings up to 150 Mc, and
with Reduced Ratings at Higher Frequencies.
Forced-Air Cooling may be Required Above 50 Mc.

GENERAL DATA

Electrical:

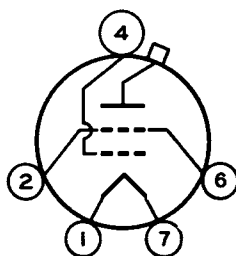
	Min.	Av.	Max.	
Filament, Thoriated Tungsten:				
Voltage (AC or DC)	-	6 ^a	-	volts
Current at filament volts=6 . .	3.2	-	3.8	amp
Mu-Factor, Grid No.2 to Grid No.1 .	5	-	7	
Direct Interelectrode Capacitances (Approx.):				
Grid No.1 to plate	-	-	0.12	pf
Grid No.1 to filament and grid No.2.	6	-	8.5	pf
Plate to filament and grid No.2.	1.9	-	2.6	pf

Mechanical:

Operating Position	Vertical, base up or down
Maximum Overall Length	4-3/16"
Maximum Diameter	2-3/8"
Weight (Approx.)	3 oz
Cap.	Skirted Small (JEDEC No.C1-22)
Base	Special-Button Septar 5-Pin

BOTTOM VIEW

Pin 1 - Filament
Pin 2 - Grid No.2
Pin 4 - Grid No.1



Pin 6 - Grid No.2
Pin 7 - Filament
Cap - Plate

Thermal:

Seal Temperatures.	200 max.	°C
Bulb Temperature	225 max.	°C

Adequate ventilation around the tube must be provided to prevent the temperatures of the bulb and seals from exceeding the specified maximum values.

Components:

Socket Johnson 122-101, National HX-29, or equivalent
Heat-Radiating Plate Connector . . .Eimac HR-6, or equivalent



8165/4-65A

AF POWER AMPLIFIER & MODULATOR — Class AB₁^b

Maximum CCS^c Ratings, Absolute-Maximum Values:

DC PLATE VOLTAGE.	3000 max.	volts
DC GRID-No.2 VOLTAGE.	600 max.	volts
DC PLATE CURRENT.	150 max.	ma
GRID-No.2 INPUT	10 max.	watts
PLATE DISSIPATION	65 max.	watts

PF POWER AMPLIFIER & OSCILLATOR — Class C Telegraphy^d and

RF POWER AMPLIFIER — Class C FM Telephony

Maximum CCS Ratings, Absolute-Maximum Values:

At frequencies up to 150 Mc

DC PLATE VOLTAGE.	3000 max.	volts
DC GRID-No.2 VOLTAGE.	400 max.	volts
DC GRID-No.1 VOLTAGE.	-500 max.	volts
DC PLATE CURRENT.	150 max.	ma
GRID-No.2 INPUT	10 max.	watts
GRID-No.1 INPUT	5 max.	watts
PLATE DISSIPATION	65 max.	watts

PLATE-MODULATED RF POWER AMPLIFIER — Class C Telephony

*Carrier conditions per tube for use
with a maximum modulation factor of 1*

Maximum CCS Ratings, Absolute-Maximum Values:

At frequencies up to 150 Mc

DC PLATE VOLTAGE.	2500 max.	volts
DC GRID-No.2 VOLTAGE.	400 max.	volts
DC GRID-No.1 VOLTAGE.	-500 max.	volts
DC PLATE CURRENT.	120 max.	ma
GRID-No.2 INPUT	10 max.	watts
GRID-No.1 INPUT	5 max.	watts
PLATE DISSIPATION	45 max.	watts

^a The filament voltage, as measured at the filament pins, should be 6.0 volts. For long life, excursions from this value should not exceed ± 5 per cent.

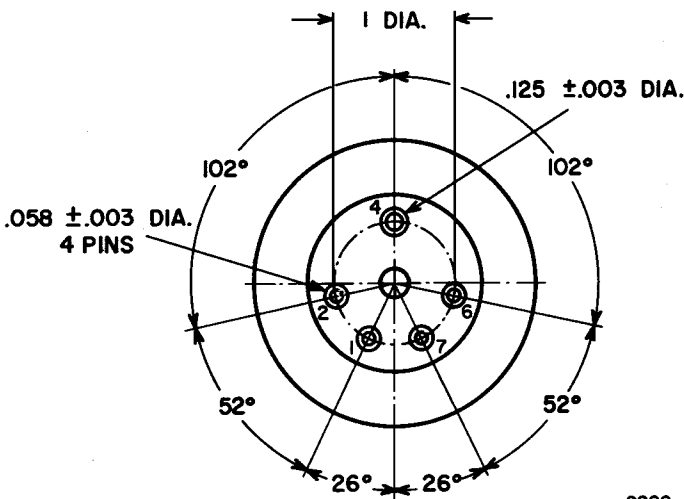
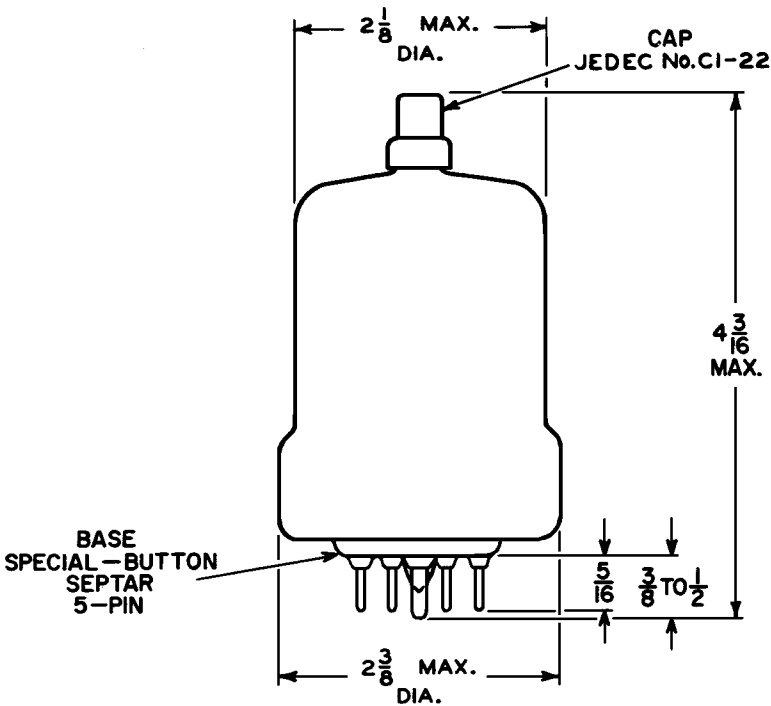
^b Subscript 1 indicates that grid-No.1 current does not flow during any part of the input cycle.

^c Continuous Commercial Service.

^d Key-down conditions per tube without amplitude modulation. Amplitude modulation essentially negative may be used if the positive peak of the audio-frequency envelope does not exceed 115 per cent of the carrier conditions.



8165/4-65A



92CS-7156R3

ALL DIMENSIONS IN INCHES

