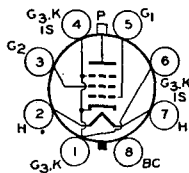


BEAM POWER TUBE

2E26

Glass-octal heater-cathode type used as af power amplifier and modulator and as rf power amplifier and oscillator. May be used with full input up to 125 Mc and with reduced input

up to 175 Mc. Class C Telegraphy maximum plate dissipation, CCS 10 watts, ICAS 13.5 watts.



HEATER VOLTAGE (AC/DC)	6.3 $\pm$ 10%	volts
HEATER CURRENT	0.8	ampere
TRANSCONDUCTANCE*	3500	μ mhos
MU-FACTOR, Grid No.2 to Grid No.1**	6.5	
DIRECT INTERELECTRODE CAPACITANCES:■		
Grid No.1 to plate	0.20 max	μ f
Grid No.1 to cathode, grid-No.3, internal shield, grid-No.2, and heater.	13	μ f
Plate to cathode, grid-No.3, internal shield, grid-No.2, and heater.	7	μ f
BULB TEMPERATURE (At hottest point)	210 max	$^{\circ}$ C

* Plate volts, 500; grid-No.2 volts, 200; plate milliamperes, 20.
 ** Plate and grid-No.2 volts, 200; plate milliamperes, 20.
 ■ Base sleeve connected to ground.

AF POWER AMPLIFIER AND MODULATOR—Class AB₂

Maximum Ratings:	CCS	ICAS	
DC PLATE VOLTAGE	400 max	500 max	volts
DC GRID-No.2 (SCREEN-GRID) VOLTAGE	200 max	200 max	volts
MAXIMUM-SIGNAL DC PLATE CURRENT■	75 max	75 max	ma
MAXIMUM-SIGNAL PLATE INPUT■	30 max	37.5 max	watts
MAXIMUM-SIGNAL GRID-No.2 INPUT■	2.5 max	2.5 max	watts
PLATE DISSIPATION■	10 max	12.5 max	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode.	100 max	100 max	volts
Heater positive with respect to cathode.	100 max	100 max	volts

Typical Operation (Values are for 2 tubes):

DC Plate Voltage	400	500	volts
DC Grid-No.2 Voltage†	125	125	volts
DC Grid-No.1 (Control-Grid) Voltage	-15	-15	volts
Peak AF Grid-No.1-to-Grid No.1 Voltage	60	60	volts
Zero-Signal DC Plate Current	20	22	ma
Maximum-Signal DC Plate Current	150	150	ma
Maximum-Signal DC Grid-No.2 Current	32	32	ma
Effective Load Resistance (Plate to plate)	6200	8000	ohms
Maximum-Signal Driving Power (Approx.)	0.36	0.36	watt
Maximum-Signal Power Output (Approx.)	42	54	watts

Maximum Circuit Values (CCS or ICAS conditions):

Grid-No.1-Circuit Resistance:		
For fixed-bias operation	30000† max	ohms
For cathode-bias operation	Not recommended	

■ Averaged over any audio-frequency cycle of sine-wave form.

† Preferably obtained from a separate source or from the plate-supply voltage with a voltage divider.

‡ In applications requiring the use of grid-No.2 voltages above 135 volts, provisions should be made for adjustment of grid-No.1 bias for each tube separately. The necessity for this adjustment at lower grid-No.2 voltages depends on the distortion requirements and on whether the plate-dissipation rating is exceeded at zero-signal plate current.

§ For operation at less than maximum ratings, this value may be as high as 100000 ohms.

PLATE-MODULATED RF POWER AMPLIFIER—Class C Telephony

Carrier conditions per tube for use with a maximum modulation factor of 1.0

Maximum Ratings:	CCS	ICAS	
DC PLATE VOLTAGE	400 max	500 max	volts
DC GRID-No.2 VOLTAGE	200 max	200 max	volts
DC GRID-No.1 VOLTAGE	-175 max	-175 max	volts
DC PLATE CURRENT	60 max	70 max	ma
DC GRID-No.1 CURRENT	3.5 max	3.5 max	ma
PLATE INPUT	20 max	27 max	watts

RCA Transmitting Tubes

GRID-NO.2 INPUT.....	1.7 max	2.3 max	watts
PLATE DISSIPATION.....	6.7 max	9 max	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode.....	100 max	100 max	volts
Heater positive with respect to cathode.....	100 max	100 max	volts

Typical Operation:

DC Plate Voltage.....	400	500	volts
DC Grid-No.2 Voltage ^o	160	180	volts
From series resistor of.....	32000	35500	ohms
DC Grid-No.1 Voltage ^σ	-50	-50	volts
From grid-No.1 resistor of.....	20000	20000	ohms
Peak RF Grid-No.1 Voltage.....	60	60	volts
DC Plate Current.....	50	54	ma
DC Grid-No.2 Current.....	7.5	9	ma
DC Grid-No.1 Current (Approx.).....	2.5	2.5	ma
Driving Power (Approx.).....	0.15	0.15	watt
Power Output (Approx.).....	13.5	18	watts

Maximum Circuit Values (CCS or ICAS conditions):

Grid-No.1-Circuit Resistance.....	30000† max	ohms
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^o Obtained preferably from separate source modulated along with plate supply, or from the modulated plate supply through series resistor of value shown.

^σ Obtained from the grid-No.1 resistor or from a combination of grid-No.1 resistor with either fixed supply or cathode resistor.

† For operation at less than maximum ratings, this value may be as high as 100000 ohms.

RF POWER AMPLIFIER AND OSCILLATOR—Class C Telegraphy# and

RF POWER AMPLIFIER—Class C FM Telephony

Maximum Ratings:

	CCS	ICAS	
DC PLATE VOLTAGE.....	500 max	600 max	volts
DC GRID-NO.2 VOLTAGE.....	200 max	200 max	volts
DC GRID-NO.1 VOLTAGE.....	-175 max	-175 max	volts
DC PLATE CURRENT.....	75 max	85 max	ma
DC GRID-NO.1 CURRENT.....	3.5 max	3.5 max	ma
PLATE INPUT.....	30 max	40 max	watts
GRID-NO.2 INPUT.....	2.5 max	2.5 max	watts
PLATE DISSIPATION.....	10 max	13.5 max	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode.....	100 max	100 max	volts
Heater positive with respect to cathode.....	100 max	100 max	volts

Typical CCS Operation:

	125 Mc	160 Mc	
DC Plate Voltage.....	400	300	volts
DC Grid-No.2 Voltage ^o	190	170	volts
From series resistor of.....	19000	21500	ohms
DC Grid-No.1 Voltages ^σ	-30	-75	volts
From grid-No.1 resistor of.....	10000	30000	ohms
Peak RF Grid-No.1 Voltage.....	41	85	volts
DC Plate Current.....	75	75	ma
DC Grid-No.2 Current.....	11	6	ma
DC Grid-No.1 Current (Approx.).....	3	2.5	ma
Driving Power (Approx.).....	0.12	1.5	watts
Power Output (Approx.).....	20	13	watts

Typical ICAS Operation:

	125 Mc	160 Mc	
DC Plate Voltage.....	600	350	volts
DC Grid-No.2 Voltage ^o	185	200	volts
From series resistor of.....	41500	21500	ohms
DC Grid-No.1 Voltage ^σ	-45	-90	volts
From grid-No.1 resistor of.....	15000	30000	ohms
Peak RF Grid-No.1 Voltage.....	57	105	volts
DC Plate Current.....	66	85	ma
DC Grid-No.2 Current.....	10	7	ma
DC Grid-No.1 Current (Approx.).....	3	3	ma
Driving Power (Approx.).....	0.17	2	watts
Power Output (Approx.).....	27	16.5	watts

Maximum Circuit Values (CCS or ICAS conditions):

Grid-No.1-Circuit Resistance.....300000 max† ohms

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.

* Obtained preferably from separate source, or from the plate-supply voltage with a voltage divider, or through a series resistor of value shown. Grid-No.2 voltage must not exceed 600 volts under key-up conditions.

‡ Obtained from fixed supply, by grid-No.1 resistor, by cathode resistor, or by combination methods.

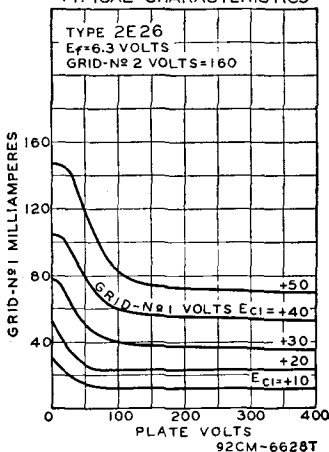
† For operation at less than maximum ratings, this value may be as high as 100000 ohms.

OPERATING CONSIDERATIONS

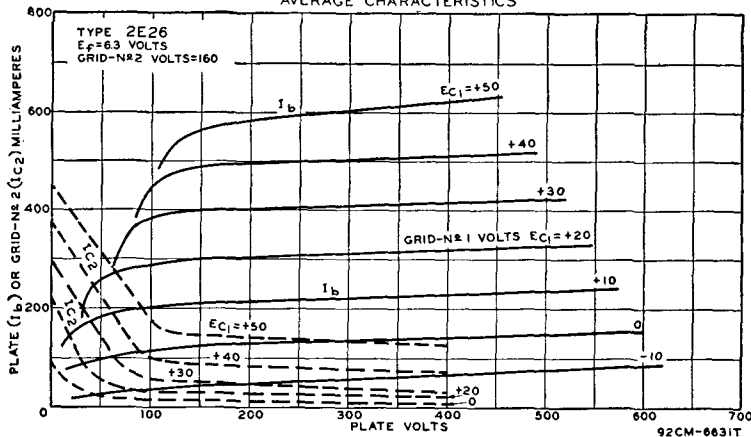
Type 2E26 requires Octal socket and may be mounted in any position. Effective rf grounding and simplified shielding are facilitated by the base sleeve with separate base-pin connection and the single base-pin connection for cathode, grid No.3, and internal shield. OUTLINE 15, Outlines Section.

For operation at 150 Mc, plate voltage and plate input should be reduced to 83 per cent of maximum ratings; at 160 Mc, to 75 per cent; at 175 Mc, to 68 per cent. Plate shows no color when the tube is operated at maximum CCS or ICAS ratings.

TYPICAL CHARACTERISTICS



AVERAGE CHARACTERISTICS



POWER PENTODE

3A4

Seven-pin miniature type having coated filament used as rf power amplifier in light-weight, compact, portable, low-power, battery-operated equipment. May be used at full input up to 10 Mc. Class C maximum CCS plate dissipation, 2 watts.

