

TENTATIVE DATA

EITEL-McCULLOUGH, INC
SAN BRUNO, CALIFORNIA

4-65A
POWER TETRODE

The Eimac 4-65A is a small radiation-cooled transmitting tetrode having a maximum plate dissipation rating of 65 watts. The plate operates at a red color at maximum dissipation. Short, heavy leads and low interelectrode capacitances contribute to stable efficient operation at high frequencies.

Although it is capable of withstanding high plate voltages, the internal geometry of the 4-65A is such that it will deliver relatively high power output at low plate voltage.

The quick-heating filament allows conservation of power during standby periods in mobile applications.

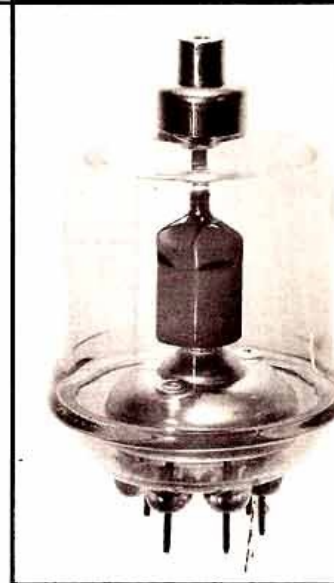
GENERAL CHARACTERISTICS

ELECTRICAL

Filament:	Thoriated tungsten	
	Voltage	6.0 volts
	Current	3.5 amperes
Grid-Screen Amplification Factor (Average)		5
Direct Interelectrode Capacitances (Average)		
	Grid-Plate	0.08 uuf.
	Input	8.0 uuf.
	Output	2.1 uuf.

MECHANICAL

Base	5-pin -- Fits Johnson No. 122-247 or 122-101 Socket.
Mounting	Vertical, base down or up
Cooling	Radiation ¹
Maximum Overall Dimensions:	
Length	4.25 inches
Diameter	2.31 inches
Net Weight	3 ounces
Shipping Weight (Average)	1.5 pounds



RADIO-FREQUENCY POWER AMPLIFIER OR OSCILLATOR

Class-C Telegraphy or FM Telephony (Key-down conditions, per tube)

MAXIMUM RATINGS

D-C PLATE VOLTAGE ¹	3000 MAX. VOLTS
D-C SCREEN VOLTAGE	400 MAX. VOLTS
D-C GRID VOLTAGE	-500 MAX. VOLTS
D-C PLATE CURRENT	150 MAX. MA.
PLATE DISSIPATION	65 MAX. WATTS
SCREEN DISSIPATION	10 MAX. WATTS
GRID DISSIPATION	5 MAX. WATTS

TYPICAL OPERATION

D-C PLATE VOLTAGE	600	1000	1500	VOLTS
D-C SCREEN VOLTAGE	250	250	250	VOLTS
D-C GRID VOLTAGE	-45	-70	-75	VOLTS
D-C PLATE CURRENT	125	125	125	MA.
D-C SCREEN CURRENT	40	35	25	MA.
D-C GRID CURRENT	17	14	12	MA.
PEAK R-F GRID INPUT VOLTAGE (approx.)	116	132	133	VOLTS
DRIVING POWER (approx.)	2	1.8	1.6	WATTS
SCREEN DISSIPATION	10	8.7	6.2	WATTS
PLATE POWER INPUT	75	125	188	WATTS
PLATE DISSIPATION	26	37	50	WATTS
PLATE POWER OUTPUT	49	88	138	WATTS

¹Maximum allowable voltage is limited by seal temperatures, which increase with increasing frequency. With normal ventilation, maximum rated plate voltage may be used at frequencies up to approximately 50 Mc. Above this frequency, the plate voltage should be reduced, or special attention should be given to seal cooling. The temperature of any seal should not be allowed to exceed 200 degrees C. Where ventilation is not adequate, special attention to seal cooling may be required below 50 Mc.

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